Nova Scotia

ANNUAL REPORT

for the fiscal year
ending March 31, 1987

Victoria General Hospital

89-05923/

TO:

The Honourable Alan Abraham, C.D.
Lieutenant-Governor of Nova Scotia

May It Please Your Honour:

I beg to present herewith the Annual Report of the Victoria General Hospital for the period of April 1, 1986 to March 31, 1987.

Your Obedient Servant,

Halifax, Nova Scotia
March, 1987

Ronald S. Russell
Minister of Health

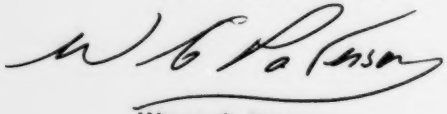
TO:

The Honourable R.S. Russell
Minister of Health
Province of Nova Scotia
Halifax, Nova Scotia

Dear Mr. Minister:

On behalf of the Board of Commissioners, it is my pleasure to submit to you the 120th Annual Report of the Victoria General Hospital covering the period of April 1, 1986 to March 31, 1987.

Respectfully submitted,



Wayne C. Paterson
Chairman
Board of Commissioners
Victoria General Hospital

Mr. Wayne C. Paterson, Chairman
Board of Commissioners
Victoria General Hospital
Halifax, NS

Dear Mr. Paterson:

I am pleased to submit the 120th Annual Report of the Victoria General Hospital for the period from April 1, 1986, to March 31, 1987.

The Victoria General Hospital continued to serve as the primary adult tertiary care hospital in Nova Scotia, as well as serving the people of the Halifax metropolitan area, providing excellent patient care.

Medical services continued to expand. Of particular note was the opening of the Extracorporeal Shock Wave Lithotripter. The lithotripter, only the second in the country, disintegrates kidney stones non-invasively via shock waves. To year's end 861 procedures were performed on 636 patients from throughout Eastern Canada.

Also this year, the Victoria General opened its new cardiac catheterization laboratories. The new facilities are among the most advanced in North America and will serve Atlantic Canadians well in the area of cardiac investigation.

Cardiac care at the Victoria General advanced significantly with the implantation of the first automatic internal defibrillator in Atlantic Canada. Meanwhile, the Department of Emergency Medicine initiated the training of ambulance attendants in prehospital cardiac defibrillation. Victoria General ambulance attendants are now skilled in recognizing cardiac arrest and administering defibrillation to recussitate. Within a month after course completion our ambulance attendants were able to put their training into practice saving a life via cardiac defibrillation at the scene.

The number of open heart surgeries rose to more than 700. With the increased caseload came the need for expansion and renovation of the cardiovascular intensive care unit. Beds in CVICU were increased from seven to 11. Meanwhile, plans for conducting heart transplants in the future progressed.

The Hospital's multi-organ transplantation program is developing. A total of 25 multi-organ donors were procured. The number of kidney transplants performed at the VG is the highest yet at 98. Liver transplants totalled eight.

National Organ Donor Awareness Week was kicked off at the Victoria General this year with a visit from the Honourable Jake Epp, Federal Minister of Health and Welfare.

Late in the year, the Victoria General Hospital's bone bank was dedicated to the memory of its founder and first director, Dr. A.G.A. McDermott. The neurosurgery unit was renamed the Dr. W.D. Stevens Unit in honour of the neurosurgeon who pioneered this speciality at the Victoria General.

The hospital's renal dialysis program established the first ever summer dialysis facility for Atlantic Canada on Prince Edward Island. **Sunshine Retreat** will allow VG patients to take a vacation while at the same time attending to their dialysis needs.

The Department of Diagnostic Radiology continues to be one of the busiest in the hospital. The department performed more than 210,000 examinations this year. As well, a new teleradiology system was introduced with the cooperation of the Nova Scotia Department of Health. The system transmits images from community hospitals to the Victoria General, so that we may provide expert interpretation for those hospitals lacking specialists. The department was also able to purchase a new mammography unit jointly with the National Cancer Institute for use in the National Breast Screening Program. On completion of the study the unit will be used for general mammography studies at the hospital.

In respirology the hyperbaric oxygen unit continued to operate to capacity. Speciality clinics in cystic fibrosis and home oxygen continued to be active. The department's major thrust over the next year will be the development of the sleep laboratory and the subsequent development of a sleep program. Meanwhile, in respiratory technology, the Victoria General experienced considerable difficulties in attracting and holding qualified therapists due to a national shortage.

The VG's Department of Psychiatry initiated three specialized clinical programs in eating disorders, refractory depression and neuropsychiatry. The eating disorder program in particular is expanding and beginning to develop pre and post admission outpatient activity in the ambulatory care centre. In connection with the growth of this program, Physiotherapy has established a unique research program. For the first time nationally a physical exercise program with patients suffering from anorexia nervosa is being conducted on a research basis to study the link between distortion of body image and exercise. The research is being conducted jointly with the Department of Psychiatry.

Cases of Acquired Immune Deficiency Syndrome (AIDS) are rising. This year, 12 new cases were reported.

Victoria General laboratories continue to be extremely busy. No major epidemiology outbreaks occurred during the year but routine requests for HIV antibody testing, genital chlamydia testing and testing for respiratory infections increased significantly. In addition, special transplant services established a year ago have been expanded as activity in transplantation has increased.

The reorganization of the nursing division has resulted in a smoother nursing services operation overall. A nursing task force is helping with the development of software for nursing's computerized applications. This year two nursing units received computer training and went on-line. To date, computer terminals are on all medical nursing units and the majority of the nursing staff are trained. The Victoria General's clinical promotion project within the nursing division received a grant of $103,000 from the National Health Research and Development Program.

The School of Cytotechnology received full accreditation status. Meanwhile, the School of Respiratory Therapy is proposing an increase in the number of students admitted to the program to offset the shortage of RTs. The School of Nursing graduated 100 students this year. Post RN short courses will be transferred from the Nursing Services Division to Educational Services Division early next year.

The pilot Value Improvement Project at the Victoria General was completed this year. During the project the costs of a hospital stay for a total hip replacement and for an uncomplicated myocardial infarction were determined and compared to the four other Canadian hospitals in the study. Two full-time staff have been assigned to carry on with the project.

The Victoria General's dietetics department has experienced a 103% increase over last year in outpatient consults to clinical dieticians. Nutrition promotion with the Cancer Treatment Research Foundation was increased and Clinical Nutrition Services intends to integrate inpatient and outpatient dietician services. This year was the first to see a VG cafeteria implement a smoke-free policy. This is a first step in an effort toward a total smoke-free hospital environment.

This year was the first full year of operation for the Victoria General Hospital's Pastoral Care Department. The establishment of the department with the appointment of a full-time coordinator has united members of the Victoria General's pastoral care community.

The Patient Representative had 843 contacts with patients and families during the year. Problems or concerns made up about half of these contacts.

This year more than 400 VG volunteers donated 12,575 hours of their time to VG volunteer programs and services.

In Finance, a disaster recovery plan for in-house systems was researched, developed and implemented and the manager of Accounting Services has been reassigned to develop an Internal Audit Program.

The Victoria General Hospital's Management Engineering Department, now in its third full year of operation, carried out a work plan of 54 systems improvement and computer projects. Notably, the comprehensive patient-oriented computerized information system (HMIS) concluded its software development phase on schedule. This system product is the most current and one of the most advanced systems in Canada. Even before it was complete it had been exported and installed in two hospitals in Quebec. In the administrative information systems area the hospital was closely involved as a task force member in the evaluation and selection of a government-wide human resource management system. The ISI system product with a hospital developed data collections module was selected and a major project in the next fiscal year will be installation of the system in the Victoria General.

Plant Engineering has undergone a year of reorganization. The architect planning office was amalgamated with the Plant Engineering department yielding significant benefits and an increase in efficiency in the delivery in planning and maintenance services. At year's end, 61 capital and maintenance projects were in various stages of implementation.

Modern Cleaning has been awarded the hospital's housekeeping contract to March, 1989. Waste disposal practices and concerns played a major role in the housekeeping department in the past year. Repairs to the incinerator during the fall of 1986 necessitated the transport of all pathological waste to the Tupper Building for incineration over a 10 day period. The VG incinerator is not able to generate sufficiently high temperatures to properly destroy certain types of waste.

Absenteeism has been reduced considerably in the laundry department. The rate has gone from 28 days per person last year to 12.8 per person this year.

Personnel reports that efforts to improve attendance overall have resulted in a better attendance record. An Excellent Attendance Banquet in November was held for those employees with perfect attendance.

The Ambulatory Care Centre reports that total patient visits were down this year by more than 1,000 visits. The relocation of Endocrinology to the Halifax Infirmary in early fiscal 1986 accounts for the decrease.

Security was centralized this year to the main lobby of the Ambulatory Care Centre.

In closing, I would like to extend my thanks to all staff at the Victoria General Hospital and to the Board of Commissioners for their hard work and support during what has been a very busy year.

Yours very truly,

Richard L. Criddle
Executive Director

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BOARD OF COMMISSIONERS

Mr. Wayne C. Paterson
Mrs. Margaret L. Davison
Mr. Donald F. Flemming
Prof. R. G. Murray
Mrs. Gloria L. Quigley
Mr. J. Kenneth Brown
Dr. C. E. Hope
Mrs. M.W. Fenton
Mrs. Florence MacGillivary
Mr. W.W. Hirtle
Mrs. K.A. Norman
Mr. R.L. Criddle

ADMINISTRATIVE STAFF

R.L. Criddle, Executive Director
E.V. Haldane, M.D., F.R.C.P.(C), F.R.C.P.(E), Medical Director
M. Grantham, R.N., M.Sc.(A), Director, Nursing Services
J. Magee, R.N., B.Sc.N., Director, Educational Services
J.A. Stewart, B.Sc., P. Dt., Director, Special Services
D.M. McNaughton, C.D., B.A., M.H.A., Director, Administrative Services

CLINICAL DEPARTMENT HEADS

Dr. S.A.Awad, Urology
Dr. D.B. Fraser, Diagnostic Radiology
Dr. R.C. Fraser, Gynecology
Dr. C.E. Hope, Anaethesia
Dr. W.J. Howse, Neurosurgery
* Dr. P. Larsen, Emergency Medicine
Dr. B. Perey, Surgery
Dr. D. Precious, Oral Surgery
Dr. K.R. Rozee, Microbiology
Dr. D.C. Brown, Family Medicine
Dr. A. Munro, Psychiatry
Dr. G.M. Novotny, Otolaryngology
Dr. D.H. Thomson, Radiation Oncology
Dr. M.A. MacAulay, Pathology
Dr. R.N. Anderson, Medicine
Dr. E.V. Rafuse, Ophthalmology

* Dr. Larsen was replaced by Dr. M. Murphy (acting head) in December, 1986.

VICTORIA GENERAL HOSPITAL
1986/87 STATISTICS

Maximum Beds Available	807	
Average Beds Available	789	
Intensive Care Beds	46	
Hospital Total Area	132,202	sq meter
	1,423,017	sq feet
Employees Full Time	3,165	
Total Count	3,974	
Admissions	21,843	
Separations	21,729	
Average Census	679	
Deaths	830	
Death Rate	3. 82%	
Patient Days	247,579	
Occupancy	86. 06%	
Average Length of Stay	11. 25	days
Days Stay	244,705	
Emergency Admissions	6,522	
Day Surgery Cases	14,316	
Emergency Visits	41,674	
ACC Visits	70,106	
Ambulatory Visits	180,548	
O.R. Cases	23,980	
O.R. Inpatient cases	13,477	
Lab Units	26,306,033	
Radiology Exams	210,570	
Inpatient Exams	93,809	
Physiotherapy Attendances	66,903	
Occupational Therapy Attendances	12,050	
Average Acuity Index: General Units	1. 42	
Intensive Care	4. 11	
Meal Days	543,524	
Meals	1,630,572	
Laundry Washed	2,124,627	kg.
	4,690,126	lb.

MEDICAL SERVICES DIVISION

ADMISSIONS AND DISCHARGE DEPARTMENT

The workload in the Admission and Discharge Department at the Victoria General Hospital for the 1986–87 fiscal year is as follows:

Inpatient Admissions	21,843
Emergency Admissions	6,522
Emergency Registrations	41,674
Day Patients	14,316
Discharges	21,729
Pre-Admission Testing Bookings	558
Average Daily Occupancy	86.06%
Average Daily Hospital Census	679

The current year's achievements include implementation of the Pre-Admission Testing Program at the Victoria General Hospital with the participation of 20 hospitals throughout Nova Scotia.

DEPARTMENT OF MEDICINE

In yet another active year for the department, the new cardiac catheterization laboratories became operational and the angioplasty program expanded considerably, now assuming its appropriate place in the treatment of coronary artery disease. Dermatology finalized arrangements to start its Dermatopathology Program while hematology began expanding its ambulatory treatment activities. **Sunshine Retreat** provided a welcome vacation for dialysis patients during the summer.

Academic programs evolved in a number of ways. The Infectious Disease Resident Education Program was approved, clinical research activities have continued to expand and involvement of house staff in research projects has increased. The department provided further assistance to the Dean's office with the appointment of a new Vice-Dean.

The following overview of developments in each service points to many other changes.

Cardiology

The patient volume in Cardiology continued to increase in 1986 with approximately 2,400 patients undergoing either investigation or treat-

ment, compared to 2,000 in the previous years. Patient visits to the Ambulatory Care Centre number between 5,000 and 6,000 visits per year. In September two new cardiac catheterization suites were opened at the hospital, providing patient investigation and treatment equal to any functioning units on the continent. The third room will be in operation at a later date.

The Echocardiographic Lab, ECG Lab, Nuclear Angiography Lab, Exercise Stress Testing Lab and the Holster Monitoring Lab continue to function at close to capacity volume.

During the year the Cardiology service experienced great pressures on patient beds, with admissions to Coronary Care increasing to over 100 per month from 80. These increases were caused largely by the unexpected closure of intensive care beds at the Halifax Infirmary and Camp Hill Hospital. However, an increase of three beds should result in a shorter waiting list for cardiac investigation. The Cardiovascular Surgery Intensive Care Unit has been expanded from seven to 11 beds. Three major staffing additions were made during the past year.

In conjunction with Cardiovascular Surgery, the service plans to implement a cardiac transplant program in the near future.

The subject of thrombolysis of clot in acute myocardial infarction is being actively investigated. Other new developments in Cardiology include the expansion of the angioplasty program to deal with occluded coronary vessels in a non-surgical manner and balloon valvuloplasty which is a non-surgical therapy for stenotic valves.

Dermatology

The work of the Dermatology service has continued much the same as in previous years. Efforts continued in undergraduate training with clinical teaching at the Victoria General Hospital and the IWK Children's Hospital. The postgraduate program uses the facilities of the Victoria General Hospital. Arrangements were made during the past year to include the Halifax Infirmary in noon presentations to the general medical residents.

The Dermatology service is one of four in Canada selected by the Hoffmann LaRoche Company for trial of the new retinoid, Etretin.

The service has continued to be represented at national meetings

such as the Canadian Dermatology Association, the Westwood Meetings in Toronto and the American Academy of Dermatology. Papers were presented by members at a number of these meetings.

Due to the death of the only Dermatologist in Newfoundland in 1986, Drs. J. Klotz and J.B. Ross undertook undergraduate teaching at Memorial University.

Endocrinology

With the appointment of Dr. M.H. Tan to Head of Medicine at the Halifax Infirmary in 1986—the major part of the Endocrinology Service is now primarily based at the Halifax Infirmary. However, there are still two beds at the Victoria General Hospital and an excellent consultation service is provided by the Endocrinology staff. The service is also covered by rotating residents during the year.

Gastroenterology

The Gastroenterology service investigates all gastrointestinal (G.I.) disorders on inpatients and outpatients. It also provides diagnostic procedures—gastroscopy, colonoscopy and G.I. function tests. Workload has increased by 15 percent.

The Liver Transplant Program continued with a number of successful transplantations to date. The Liver Transplantation Advisory Committee meets weekly to assess the suitability of patients for potential liver transplantation. Follow-up continues with patients transplanted at the Victoria General Hospital as well as patients transplanted elsewhere.

Members of the service hold various positions, including President of the Canadian Association of Gastroenterology, Vice-Dean of the Faculty, and Chairman of the Ethics Committee of the World G.I. Association.

General Medicine

The large number of patients admitted from the Emergency Department to the three General Medicine Services continues to tax the energies of the attending staff. It also keeps the bed occupancy rate very high. Admissions to General Medicine Services in 1986–87 totalled 1,178 compared to 1,115 in 1985–86.

There is continued active involvement by members of the service in

medical education. Also, a pre-operative consultation program provides a unique experience for more senior residents.

The Stroke and Geriatric Assessment Program (SAGA) has been incorporated under General Medicine and continues its work with stroke and geriatric patients.

Members are working on a workshop for the spring of 1988 entitled "The Role of Academic General Medicine in the 1990's".

Hematology

Inpatient activity remains very active, with approximately 550 patients admitted to the Hematology service during the past year. Chemotherapy may now be given on an outpatient basis, freeing active treatment beds.

Members of the service contribute to education—both undergraduate and postgraduate—and all residents are involved in research projects.

Infectious Disease

The number of Infectious Disease outpatient consultations and visits increased this year from 1,397 to 1,583 while the number of inpatient consultations dropped from 1,010 to 947. All AIDS patients have been hospitalized on the Infectious Disease service. There were five patients with AIDS on the service for a period in 1986. It is likely this trend will continue, making it necessary for the clinical service to adapt.

The service plans to start a newly approved Royal College sub-specialty training program in Infectious Disease.

Members of the service are involved in both undergraduate and postgraduate teaching and serve on many administrative committees.

Nephrology

Major personnel changes have occurred. The first chief of service has completed a distinguished term and a successor has been appointed. The nursing supervisor of the Dialysis Program has taken a leave of absence to become administrative co-ordinator for the department. A new member with special interest in dialysis joined the service for the new academic year.

A highlight of the past year was the opening of the summer dialysis facility, **Sunshine Retreat**, at Cavendish, Prince Edward Island. Patients requiring chronic hemodialytic or CAPD support can now enjoy a summer holiday at Cavendish with their families.

Clinical activities are based at the Victoria General with consultative advice available to other Halifax area hospitals. There were 178 inpatient admissions to the Nephrology Service. The Renal Transplant Program represents the major component of the vital organ transplant at the Victoria General Hospital. The volume of clinical activity pertaining to transplantation remains the highest in the country with 98 renal transplants performed during the year. Continuing care is provided on an outpatient basis for approximately 450 renal transplant recipients. Hemodialysis procedures totalled 5,104.

The director of the Dialysis Program and the nursing supervisors continued to be responsible for satellite in-centre hemodialysis programs based at the IWK Hospital, Sydney City Hospital and Yarmouth Regional Hospital. Total procedures performed at these institutions were 702, 1,920, and 887 respectively.

The Home Dialysis Unit experienced a substantial increase in activity during the past year. In conjunction with the Department of Health, the Home Dialysis Unit is co-ordinating dialysis helpers (CNAs) who provide assistance to patients on peritoneal dialysis at home.

A proposal was developed between the hospital and the Nova Scotia Department of Health designating guidelines for the location, funding and operation of chronic intermittent peritoneal dialysis in community based hospitals.

Members of the Nephrology service have been involved in both undergraduate and graduate teaching, and have served on various administrative committees of the hospital. Members are involved in a number of research projects.

Neurology

The Neurology service has remained active in the continuation of medical education. Members have participated in various conferences, meetings and short courses.

An EMG course for technologists leading to accreditation through a

national examination has been established. A weekly clinical neurophysiological and neuromuscular conference for attending staff and residents has been established.

The EEG Unit was privileged to assist the Neuroradiology department in its study of the use of Iopamedol for cervical myelograms. The total number of patients receiving EEG testing during 1986–87 was 2,087.

In conjunction with the cross-training for integration of EEG/EMG units, negotiations are ongoing regarding the administrative restructuring of EEG and EMG units. The objective is to streamline the administrative process.

Physical Medicine & Rehabilitation

There has been a steady increase in all activities of the service this past year. Two Clinical Fellows were appointed—one to develop an inpatient service at the Rehabilitation Centre and the second to develop clinical services, particularly but not exclusively, directed at disabled children and adolescents. Four regional clinics are currently operating in Cape Breton, Yarmouth, Amherst and Antigonish. A fifth one is now being contemplated for the South Shore region.

The main base for clinical care, undergraduate education and core training in Physical Medicine and Rehabilitation continues to be the Nova Scotia Rehabilitation Centre. However, some third year teaching has been done at the Victoria General.

There were 404 inpatients in 1986–87 compared to 403 in 1985–86. The number of outpatients in 1986–87 was 9,350 compared to 8,685 in 1985–86.

Respirology

The service has continued to offer all diagnostic, pulmonary tests and a continuous respiratory therapy service. Specialty clinics in Cystic Fibrosis and Home Oxygen continue to be active. The Home Oxygen program has expanded modestly and plans were developed for a province-wide program. The Hyperbaric Unit is operating to capacity. Respiratory Technology has experienced considerable difficulties in attracting and holding qualified therapists as there is a national shortage of therapists.

Ambulatory Care continues to be an expanding component of clinical activities. Total admissions to the Respirology Unit were 258. Medical Intensive Care admissions were 194. Shortages of house staff created some difficulties throughout the year. It is anticipated this will be a continuing problem. However, discussions on how to deal with the situation are continuing. The shortage of Medical Intensive Care beds within the hospital is being addressed through hospital administration.

A major thrust in the next year will be the development of a Sleep Laboratory and the subsequent development of a Sleep Program with a multidisciplinary approach to sleep problems.

Rheumatology

The service participates in clinical and research programs for diagnosis and treatment of rheumatoid-related problems. It provides consultations in Halifax area hospitals.

The service participates in undergraduate education, continuing medical education and patient education.

One new staff member has been recruited. The Arthritis Society—after a national competition—awarded training fellowships to two residents which began in July, 1987.

A total of 231 in-patients were treated during a 12-month period. Pressure on Ambulatory Care resources continues to mount. A total of 2,500 patients were seen, with an increase in the number of new referrals from 579 to 655.

DEPARTMENT OF SURGERY

The maintenance of quality standards, efficiencies and cost effectiveness continues to concern all surgical programs. Work on the identification and description of these programs has continued.

Highlights of the past year included the opening of 12 intermediate care beds located on three surgical floors. This allows a level of care between intensive care and standard floor care. In the cardiovascular intensive care unit, the increase to 11 beds from seven provides improved post-operative care to heart surgery patients. The department participated in the Value Improvement Program review of cholecystectomy surgery. The Liver Transplantation Program continued to grow.

The improvement of anorectal motility investigation was made possible by the appointment of a new colorectal surgeon to the staff. There was continued growth of the Surgical Vascular Lab, a relatively new program which has become well accepted as a non-invasive diagnostic service. Enterostomal Therapy Services within the hospital continued and the introduction of service to the 10 provincial counties without previous service was completed.

An additional plastic surgeon with microsurgery skills was appointed to the staff. The use of automatic internal defibrillator devices for the control of ventricular arrhythmias was introduced. Previously, patients were sent out of province for this procedure.

New programs being planned include the introduction of heart transplantations; the use of lasers in surgical procedures; and the evaluation of quality and cost efficiencies of patient care with the help of physicians trained in bio-statistics and evaluation skills.

Workload Statistics

General Surgery Inpatient Admissions	4,395
Orthopedic Inpatient Admissions	1,971
Plastic Surgery Inpatient Admissions	875
Cardiovascular Surgery Inpatient Admissions	977
Total Admissions	**8,218**
Inpatient Surgery Operations	8,068
Outpatient Surgery Operations	4,891
Total Operations	**12,959**
General Surgery Ambulatory Care Visits	5,355
Cardiovascular Surgery Ambulatory Care Visits	1,444
Orthopedics Surgery Ambulatory Care Visits	16,797
Plastic Surgery Ambulatory Care Visits	5,872
Total visits	**29,468**

DEPARTMENT OF GYNECOLOGY

Administrative

The Department of Gynecology has undergone an extensive reorganization during the past year. Administration provided the department with a co-ordinator chief clerk in October, 1986. The co-ordinator provides the department with organizational capabilities to further improve the process of admissions, bed utilization, operating room scheduling and discharge planning.

The department acquired a new clinical area in the Ambulatory Care Centre consisting of a reception area, five examination rooms, a washroom, teaching/conference room and three offices.

In accordance with hospital policy, nursing services in the section of Gynecology and Ambulatory Care are now the responsibility of the in-hospital nursing services, Department of Gynecology.

The identified programs within the department were reorganized in early 1986. The department now comprises four basic programs: Gynecology, Endocrine and Infertility, Gynecologic Oncology and Termination of Pregnancy Organization. Each program has its own director who is accountable to the department head.

The department has 44 beds, 22 of which are utilized for the programs of Gynecology, Endocrine and Infertility, and the Termination of Pregnancy Organization.

The remaining 22 beds, located on the Gynecologic Oncology Unit of the Hospital, are specifically allocated for Gynecologic Oncology. This area provides unique facilities including a family room, a therapeutic kitchen, staff lounge and a washer/dryer for utilization by patients. A non-smoking patient lounge is also available. The unit contains a Selectron Room for the remote controlled administration of intracavitary cesium in treating selected gynecologic cancers.

Recommendations made by the Bed Utilization Committee have allocated two additional beds to the Department of Gynecology which will bring the total to 46 beds.

The department's educational programs have been reorganized. Dr. Donald Smith is now in charge of clinical clerk evaluations in conjunc-

tion with the senior resident. Dr. Linda Stirk is responsible for residents within the Department of Gynecology. Dr. John Jeffrey is developing a proposal for a more comprehensive program for interns who select the department during their fifth year of training.

Changes in residency training at the Victoria General Hospital include: increased involvement in ambulatory care clinics, designated teaching rounds on the gynecologic oncology unit, and specified case presentations to staff members in gynecology. These activities are in addition to the regularly scheduled University departmental education programs, which include weekly resident teaching sessions and a rotational series of grand round presentations.

In 1986–87 the position of senior resident was established within the department. It allows a resident in an advanced year of training to act as a junior staff person with responsibilities that include teaching, administration and gynecologic patient care.

The department operates an active ambulatory care program from its facilities in the Dickson Building. This includes colposcopy and gynecology, which total nine half-day sessions per week. Plans are underway for three additional clinics in 1987 dealing with external genitalia problems and menopause and one other colposcopy clinic.

Scientific

The department continues to be actively involved in clinical research. The Gynecological Oncology group plays an active role in the National Cancer Institute Clinical Trials in ovarian cancer. A co-operative study between the department and the Nova Scotia Cancer Treatment and Research Foundation is looking at the effects of radiation therapy treatment in elderly patients with gynecologic cancer.

Within the gynecology section of the department, departmental members have four studies nearing completion with delivery of clinical care to patients.

DEPARTMENT OF EMERGENCY MEDICINE

Administrative

Patient visits to the department decreased by five percent from 1985–86 for a total of 41,674 visits. Of these visits, 6,520 resulted in admissions to

the Victoria General. The percentage admitted remained the same as the previous year at 15.6 percent. The Ambulance Service completed 3,760 calls, down 4.1 percent from last year.

Dr. P.J. Larsen stepped down as clinical department head. Dr. Allen Rodgers was interim acting head from September 20, 1986 until November 15, 1986. Dr. Michael Murphy has now assumed the position in an acting capacity.

The management structure continued to evolve with the continuation of weekly Management Committee meetings and the addition of the Operations Committee, which includes all supervisory personnel in the department.

A renovation plan was developed which will reallocate space to improve the delivery of patient care. Specific changes planned include the installation of nursing stations in each treatment unit, the grouping of acute and sub-acute patients in separate areas, and changes to the registration, triage and communications areas. The long-awaited improvements in ventilation and the provision of central air conditioning are also part of the plan.

A reorganization proposal was developed to create a Triage/Communications position. This change will clarify the Admitting role, enable consistent provision of triage to walk-in patients, and enhance the handling of all communication systems.

Quality assurance activities have been enhanced to include a weekly Mortality and Morbidity Conference and an ongoing chart audit process.

In February, 1987, a scheduled patient transfer service began. This service facilitates the movement of patients between the Halifax Infirmary and the Victoria General.

Scientific

The Emergency medical staff sponsored the major development of prehospital care skills for ambulance staff. A program to certify staff in conducting out-of-hospital cardiac defibrillation was conducted in December, 1986. This now enables a potentially life-saving medical intervention to be made by ambulance attendants under standing orders of physicians.

Emergency room physicians conducted the Advanced Cardiac Life Support (ACLS) course for Emergency Nurses. A weekly series of lectures in Emergency Medicine was started and continues to be a well-attended learning opportunity. Twice weekly intern lectures are conducted as part of the educational service. A bi-monthly Journal Club was started in January, 1987.

Extensive changes were introduced in the functional role of the emergency room physician in the department. These changes reflect the reality that the physician has an overall responsibility for the department's patients. In order to assume this responsibility, these changes give the physician the necessary knowledge about present and in-coming patients and the authority to make decisions concerning the process of patient care.

DEPARTMENT OF RADIATION ONCOLOGY

Administrative

During the past year the workload increased approximately 5 percent. Dr. T. Vandenberg joined the department as a medical oncologist in July, 1986. Dr. R. MacCormick joined the staff as a medical oncologist in January, 1987. Both have cross appointments in the Department of Medicine.

We continue to have a major problem with staffing for Radiation Oncology. An active search is underway to appoint a new head of the department in collaboration with the Cancer Treatment and Research Foundation and Dalhousie University.

Scientific

The department continued significant involvement in clinical research. Most of the research is carried out through the National Cancer Institute, but there is also involvement in the Children's Cancer Study Group of the United States.

Dr. O.S. Wong is the Radiation Oncologist for pediatric patients. Dr. R. Wierzbicki is the Radiation Oncologist for the National Cancer Institute studies. However, all of the staff members are involved in the NCI Clinical Trials.

The medical physics division continues with research in association

with the Department of Dentistry of Dalhousie University and in the field of hyperthermia.

Dr. D. White is a member of the Nucleus Committee of Medical Oncology of the Royal College of Physicians and Surgeons. Dr. D.H. Thomson is a member of two national committees of the Canadian Association of Radiologists, a member of the Nucleus Committee of Radiation Oncology of the Royal College of Physicians and Surgeons and a member of the Board of Directors of the Canadian Oncology Society representing Radiation Oncology in Canada. In the National Cancer Institute, he is a member of the Advisory Committee on Records and Registries for Canada and a member of the Committee on TNM Classification for Canada.

Dr. O.S. Wong, Dr. T. Vandenberg, Dr. D. White and Dr. R. Wierzbicki are all on national site committees for the National Cancer Institute Clinical Trials.

DEPARTMENT OF DIAGNOSTIC RADIOLOGY

Administrative

The Department of Radiology continued to be extremely busy, performing 210,500 examinations for the 1986–87 fiscal year.

Two modern cardiac catheterization labs were installed which has resulted in a 35–40 percent increase in the number of patients treated in these units. A new neurovascular unit was also installed, providing much improved imaging technology with the addition of digital subtraction angiography for neurovascular procedures. Further progress has been made in introducing the new magnetic resonance imaging (MRI) program, and it is expected that this equipment will be installed in early 1988.

A new teleradiology system, built by one of the staff physicists, was introduced with the cooperation of the Nova Scotia Department of Health. This system transmits images from community hospitals to the Victoria General, providing expertise in interpretation for those hospitals lacking specialists.

Limited use of the new non-ionic contrast agents was approved. The contrast is primarily used in the cardiac catheterization lab. It reduces painful vascular studies for patients who have had previous reactions to the existing contrast media.

A new mammography unit was jointly purchased by the Victoria General and the National Cancer Institute for use in the National Breast Screening Program. On completion of the study it will be used for general mammography studies at the hospital.

The department also introduced a new film archival system which provides off-site storage for films older than two years old. Images from the old films can be retrieved within a day.

The department continues to maintain a strong quality assurance program which monitors the standards of all x-ray equipment and continues to ensure the highest quality of patient protection during examinations. This program is used as a basis for formulating programs in other hospitals.

Scientific

During the year 40 scientific papers were presented by the staff of the Radiology Department. Numerous vascular and cardiac studies were carried out using the new non-ionic contract agents in collaboration with the respective pharmaceutical companies. The results of some of these papers have been presented at national meetings and published in Canadian journals.

Three fellows were appointed for the year—Dr. W. Casey, a graduate of the University of Ottawa; Dr. R. Aggarwal, a medical graduate from Liverpool, England; and Dr. R. Byrne from Belfast, Ireland.

Three graduates of the residency training program were awarded Killam Scholarships of $5,000 each to assist in their continued medical education at the University of California, San Diego, and Mallinckrodt Institute, St. Louis, Missouri. Two of these fellows will return to the Victoria General for future full time staff positions. The department had three visiting professors during the year.

DEPARTMENT OF ORAL AND MAXILLOFACIAL SURGERY

Administration

More than 4,200 patients were treated in the Department of Oral and Maxillofacial Surgery during the year.

Co-operative clinical care was provided for patients who required

oral and maxillofacial surgical services, neurosurgery, internal medicine, orthopedic surgery, plastic surgery, opthalmology and otorhinolaryngology.

Members of the department conducted undergraduate and graduate teaching to dental students, interns and residents. Several continuing education courses were given throughout the year.

Exchange rotations in clinical education in the residency training program took place with Orthopedics, Infectious Diseases, Anesthesia, Medicine and Emergency Medicine.

Scientific

Several research projects are being carried out in the areas of jaw biomechanics in conjunction with members of the Department of Engineering, Dalhousie University, and a pilot project was completed with the Department of Radiology.

DEPARTMENT OF NEUROSURGERY

Administrative

The modernized Intensive Care Unit continued to work smoothly. Dr. David Malloy—who had spent a year's fellowship in Neurosurgery I.C.U. in San Diego, California—returned to the Neurosurgery Department in July. He assumed directorship of the Neurosurgery I.C.U. Upon his return he instituted many changes in protocol to facilitate better nursing care. The Neurosurgery Intensive Care unit maintained an occupancy rate ranging from 72 percent to 95 percent, with the peak months being May, June and July.

Total admissions increased slightly to 1,481 and the occupancy rate was stable, usually in the 85–90 percent range. The average length of stay hovered in the 12–14 day range, with the exception of July when it was 19.3 days. This is largely due to the fact that 30 percent of Neurosurgery beds are occupied by long-stay patients whose local hospital is the Victoria General. There has been an improvement in the speed of transfer of long-stay patients to local hospitals outside Halifax. The problem regarding patients who live in the Halifax-Dartmouth area is a unique one which will have to be addressed if the hospital is not to continue as a chronic care facility. One third of the department's beds are used by chronic care patients.

The department performed 1,455 operations, of which 1,026 were major. Initial steps were made to acquire an intraoperative ultrasound device for more precise biopsy procedures, and approval is anticipated for the purchase of a CO_2 neurosurgical laser.

The Neurosurgery clinic remained active. Four senior staff nurses were chosen for integration with the Neurosurgery clinic and this is functioning smoothly. Resident staff nurses and other staff have expressed satisfaction with the implementation of this system.

The residency program continued to function satisfactorily with conjoint neuroscience rounds with Neurology as well as a biweekly Journal Club. During this period, the department continued to have three month rotators from General Surgery and Orthopedics.

The Neurosurgery nursing staff continued to be active in the Canadian Neurological/Neurosurgical Nurses Association, including attendance at the annual meeting. Resident staff conduct a biweekly Neuroanatomy and Clinical Neurosurgery Session in the Department. Nurses attend grand rounds on Wednesday mornings, in conjunction with the Neurology service.

Dr. Howes remained acting head until January, 1987 when Dr. R.O. Holness was appointed acting head. Commencing in April, 1987 the appointment became a permanent one for a five year term.

Scientific

Ongoing studies are taking place on cerebral aneurysms and cerebral tumors. The department completed its part in the Cooperative Study on Stress Ulceration in conjunction with the University of Toronto and The G.D. Serle Co. The proceedings of this study will be published in the near future. We also completed our entry of patients into the Cooperative Study, coordinated by the University of Alberta, on the use of Calcium Antagonists in High Grade Subarachnoid Haemmorhage From Aneurysm. This study was reported at the Canadian Congress of Neurological Sciences in June, 1987 and the Congress of Neurological Surgeons in October, 1987.

MULTI-ORGAN TRANSPLANTATION PROGRAM

The year began with the official launching of Organ Donor Awareness Week for Canada, celebrated at the Victoria General in April, 1986.

Minister of Health, The Honorable Jake Epp spoke and toured local facilities.

For the second year the Kidney Foundation of Canada, Nova Scotia Branch, provided funding for the ongoing needs of computerization within the program at the Victoria General. The Multi-Organ Transplantation Program launched Transplant Atlantic, an opportunity for people involved in transplantation in Atlantic Canada to share ideas and concerns. At one of the two sessions held this year, an international speaker was present. Funding came from various government sources.

In February, 1987 the bone bank was dedicated to the memory of the founder and first director of the bone bank, Dr. A.G.A. MacDermott.

The staff in the Multi-Organ Transplantation Program continue to promote transplantation through speaking engagements and publication of patient care and research results.

Statistics

Kidney transplants	98
Liver transplants	8
Multi-Organ donors	25
Organs sent out of province:	
kidneys	1
livers	10
heart	15

DEPARTMENT OF PSYCHIATRY

Administrative

During the early part of 1986, considerable negotiation occurred to set up three sub-specialty clinic programs within the inpatient psychiatric unit. The first of these—the Eating Disorder Program—was formalized in May, 1986 and has since grown rapidly. The Refractory Depression Program was formally initiated in July, 1986. The Neuropsychiatry program came into effect in October, 1986.

Further discussion took place concerning the renovation and restructuring of the inpatient unit and the reorganization of staff to reflect new activities. Principal changes were negotiated to reduce the bed complement from 31 to 24 (with an option to increase to 26 later if

necessary). Other changes included: altering the ward configuration to provide a three bed observation area and to ensure that patient rooms were only of one or two-bed size; providing more interviewing rooms, more adequate administrative space and making the general lay-out more efficient; and to amend the staff complement in order to have two occupational therapists instead of one, one social worker instead of one-half and two clinical psychologists (none at present are assigned specifically to psychiatry).

In December, 1986 the head nurse assumed another position. Her replacement immediately began reorganization of the nursing staff, with clearer job descriptions and a firmer ongoing assessment of performance.

There was a plan to close the inpatient service for three weeks in January, 1987 to renovate the unit. During that time, a thorough revision of the nursing routine took place. The unit was closed, but delayed renovations proved very destructive to the morale of all staff. On reopening in late January, the beds were reduced to 24 and have since operated at that level. The new head nurse and new full-time social worker have subsequently done much to improve service and raise morale through hard and effective work.

As of March 31, 1987, the department was awaiting the appointment of a second occupational therapist, and Psychiatry was cooperating with Psychology to obtain two new clinical psychologists. The lack of these professionals made it difficult to maintain a desirable standard of work in some areas.

At the end of 1986 the psychiatric staff agreed that with the reduced number of beds, the units should do without an intern for a period of time. This situation is still being assessed as it has not been entirely satisfactory.

During 1986–87 Dr. A. Munro was acting head of Psychiatry at the Victoria General, representing the department on various committees.

Scientific

As previously noted, three specialized clinical programs were instituted in 1986 in eating disorders, refractory depression and neuropsychiatry. Each of these addresses a considerable service need and each is at a tertiary care level with Victoria General policy.

In order to select suitable patients for these programs, admission policies have been altered. The majority of cases are now carefully screened prior to admission. Inpatients admitted represent severe problem cases, many of which have already been assessed and unsuccessfully treated by other psychiatrists.

Although the reorganization of nursing and other professional programs has made a considerable difference in the level of clinical activity, the serious lack of psychological input and the reduced level of occupational therapy has made it impossible to refine the three clinical programs to the aspired level. Also, the Neuropsychiatry program had difficulty in obtaining sufficient neurological liaison because of shortage of neurologists' time.

Despite these difficulties the programs are taking shape and the Eating Disorder program in particular is expanding and beginning to develop pre and post-admission outpatient activity in the Ambulatory Care Centre. The other two programs plan to develop similarly.

The consultation liaison service under Dr. P. Flynn continues to be active, providing a valuable service to other medical specialties. As well as general consultations, Dr. Flynn provides specialized consultations on psychopharmacological problems.

Dr. J. Fraser Nicholson maintains an active liaison service with the Hospice program and is highly valued. He also does consultation work with the Victoria General Pain Clinic.

Although her time is severely limited by the demands of her growing number of eating disorder patients, Dr. Dianne MacDonald continued to provide consultations to the Infectious Disease Service.

A large number of psychiatric cases are seen in the Victoria General Emergency Department. Many of these are referred to Camp Hill Hospital, but a number of referrals are made to Victoria General psychiatric services. A 24-hour on-call service is provided by Psychiatry for the Emergency Department.

Statistics

Admissions to Department	193
Average length of stay	36.6
Average bed occupancy	75.4%
Number of consultations	508

Dr. S. Hirsch continued his work on suicide aided by Ms. Margaret Brock. During the year, the Suicide Project expanded with part-time help from the Department of Health. A paper, "The Vagaries of Suicide", was presented at the annual Canadian Psychiatric Association meeting in September, 1986.

As a result of his work on paranoid disorders, Dr. A. Munro was invited to be a member of the Psychosis Committee, the group preparing the revised version of DMS III (the Diagnostic and Statistical Manual Disorders, third edition) of the American Psychiatric Association.

DEPARTMENT OF UROLOGY

In July the Extracorporeal Shock Wave Lithotripter was installed and officially opened. This device is able to disintegrate kidney stones non-invasively via shock waves thereby eliminating the need for surgery in many, many cases. It was the second such unit in Canada and to year's end 861 procedures were performed on 636 patients (some patients would have had several stones).

The department's other major activities included the investigation and treatment of patients with urological malignancies, urinary incontinence, urinary tract infection, neurogenic bladder dysfunction, urinary obstruction and prostatic diseases.

QUALITY ASSURANCE AND RISK MANAGEMENT

Operating

A total of 1,976 incident reports were received between April 1, 1986 and March 31, 1987 (average of 164/month); 518 medication incident reports were received (average 43/month). The trend toward increased reporting continues. Reports are logged by the computer which has markedly increased efficiency. Issues identified include: falls, patient condition on admission/transfer; property loss; problems in support services (e.g. porter/escort delays; late meal trays; lost/late specimens; linen shortages; garbage/clutter in corridors); patients arriving from peripheral hospitals unaccompanied or without appropriate information/documentation; and misidentification/mislabelling of specimens or requisitions.

During the past year the evolution of hospital quality assurance (QA) systems has progressed well. A major recommendation in the 1985–86 program assessment was acted upon with encouraging results.

Dr. Christopher Wilson was invited to address department heads, medical staff, and the Nursing QA Committee, describing an approach to QA based on assessment of each department's principal functions. As a result, the QA Advisory Group was established.

The Hospital QA Advisory Group began meeting in November, 1986 with two representatives from each division and one medical staff representative. This provides a dynamic and useful forum for discussion and formulation of guidelines for departmental evaluation activities. The Group has developed a QA Policy Statement which has been forwarded to the Divisional Directors' Committee for endorsement. A model for formally organizing existing departmental QA activities was accepted for trial. The first testing of the model was undertaken by the Operations Department. Department heads and managers participated in a full day QA workshop with individual follow-up sessions to encourage continued progress.

Another significant change occurred during the past year. The hospital liability insurance policy was issued on a "claims made" as opposed to an "occurrence" basis. This heightened the importance of prompt, complete and objective reporting of all adverse patient occurrences or incidents. Communication links with the administrative assistant have been strengthened to ensure notification of incidents which should be reported to insurers. Furthermore, the risk management officer position was developed to handle processing of incident reports and to raise awareness about the importance of reporting.

INFECTION CONTROL COMMITTEE AND INFECTION CONTROL DEPARTMENT

Staffing of the Infection Control Department stabilized during the 1986–87 year, resulting in the resurgence of long term plans and the creation of new projects. The department expanded its services to the hospital community. The Infection Control Committee, composed of 18 members, met 11 times with an average attendance of 60 percent.

Surveillance

Routine surveillance of nursing units comprised 60 percent of two full-time positions. Regular monitoring of surgical wound infections, nosocomial pneumonia and communicable diseases continued.

Infections from clean surgical wounds averaged 2 percent per

month, an acceptable rate. However, interventions were conducted periodically when special attention was demanded. Surgeon-specific rates for cardiovascular and orthopedic surgeons will be determined and reported to appropriate surgeons beginning in April.

Twenty sentinel checks of hospital water continued on a bi-weekly basis in order to monitor the presence of Legionella pheumophila. In cooperation with Plant Engineering, hyper-chlorination of hospital water continued until October, 1986. Pipe corrosion and the risk of flooding made cessation of this practice necessary. There were no cases of Legionella detected during this time frame. However, since then cases of Legionella pneumonia have occured at the rate of one to two cases per month. Various strategies have been employed including superheating water to 180 degrees, hyperchlorinating the water on a short term basis and manually cleaning taps at target sites. Other environmental avenues of organism spread are being pursued. Respiratory therapy techniques have been monitored and changed where necessary.

Routine Chlamydia trachomatis culturing was recommended for those patients suspected of having sexually transmitted diseases and for those undergoing therapeutic abortions. As a result there has been increased case finding, resulting in reporting and follow-up of treatment.

Cases of Acquired Immunodeficiency Syndrome are rising as predicted, precipitating a demand for trouble shooting and education. During 1986, 12 new cases were reported to health authorities.

Outbreak Investigations

There were no major outbreaks of nosocomial infection identified during the year. In the fall of 1986, an investigation of scabies in staff on 7N was carried out. Follow-up was done by the Occupational Health Department. There have been no new cases reported.

Ten cases of nosocomial Salmonella heidelberg were identified in patients over a four month period. After a thorough investigation, no common factor could be determined. No new cases have been reported.

A clustering of Serratia marcescans was identified in the urine of four patients on various floors. The cases were reviewed and common factors took the investigation to the urodynamics OR where the organism was cultured from the pump intravenous tubing and water. Recommendations were made to improve equipment handling in the OR.

Studies

The department continued to assist in the epidemiological investigation of Legionella pneumphila through chart reviews, environmental culturing and observation. This study is incorporated in the nosocomial pneumonia surveillance.

The study of Swan-Ganz sleeve contamination continued. Approximately 40 sleeves have been cultured, six of which have been positive for organism growth. The study will continue until a sufficient sample has been obtained.

Infection Control Policies

The department offers consultative assistance for nursing policies and procedures which deals with controlling infection. Recommendations were offered for peripheral intravenous therapy, TPN dressings and inner cannula cleaning procedures.

Infection Control was asked to draw up a cleaning schedule for the Lithotripter Unit. Due to urgency of time, interim measures were instituted. Since this device is a new item in medical equipment, limited information has led to inquiries to the United States and Germany. Final recommendations have been approved by the Medical Staff Executive Committee.

The system of used needle collection remains unchanged due to fiscal restraint. As a result, guidelines for cleaning of sharps buckets were recommended in an effort to improve the existing procedure.

A varicella zoater policy developed in conjunction with Occupational Health and submitted to Medical Staff Executive Committee in 1985–86, was given final approval.

The Scabies Policy for patients and staff was revised during the current year and was submitted for approval in March, 1987.

In conjunction with the Gynecology Department, guidelines for the management of patients with pelvic inflammatory disease were developed. The antibiotic therapy of these patients is monitored carefully by Infection Control.

Guidelines for the cleaning of fibroptic scopes underwent review

and revision. Based on the current Centres for Disease Control guidelines, the Infection Control Committee approved the change of status from holding unit to treatment unit. The revised manual was submitted for administrative approval.

The terms of reference for the Infection Control Committee underwent complete revision and was submitted to the Bylaws Committee.

Educational Acvitivies

Forty-five formal education sessions were presented to a variety of hospital departments. Regular sessions are scheduled annually for all Nursing and Allied Health students.

The department often serves requests for education outside the hospital complex, such as the Nova Scotia Occupational Health and Safety Seminar at the College of Cape Breton and the Nova Scotia Lung Association Acute Respiratory Care Seminar.

The Infection Control education program expanded to include an orientation of all new hospital employees to Infection Control. Orientation to Nursing staff continues with taped presentations on a regular basis.

The journal club, founded in 1984, continues to meet monthly with presenters from the Victoria General and other local hospitals. Infection control journals are circulated to all staff nurses and infectious disease physicians.

Infection Control nurses attended the local Central Supply seminar and an AIDS conference while the senior nurse attended the Community and Hospital Infection Control Association national symposium in London, Ontario in her capacity as secretary for the Association.

MEDICAL RECORDS DEPARTMENT

In the fiscal year, the department received and processed the records of:

Inpatients	21,720
Day Patients	11,461
Ambulatory Care	74,935
Emergency	40,575
TOTAL	148,691

The records of patients requisitioned and sent out totalled 101,240. There were 6,425 requests by mail, phone or in person for patient information from other health facilities, doctors' offices, government agencies and other authorized persons.

There were 1,305,526 lines of inpatient reports (discharge summaries and operative reports) transcribed while 865,612 lines of outpatient reports (letters and clinic notes) were transcribed, for a total of 2,171,148 lines.

There were 105 research projects; 141 requests for statistical information; 23 subpeonas, including emergency cases; five search warrants; and 93,671 loose/late reports received and filed.

Ruby Billard was appointed Manager of Medical Records in August, 1986. Accomplishments include the installation of an additional dictating tank for ACC; expansion of PAS+ equipment; Medical Transcription Training program; request for new inpatient dictating system; and facsimile machine installation.

The department was notified that CHPA was discontinuing service to Canadian hospitals. A proposal to reclassify supervisors was resubmitted. The day supervisor of patient record services resigned in November, 1986. A word processor was installed in Urology records. The department began requisitioning patient records for floors via Sperry system. A major staffing study has been completed, showing a needed increase of .8 full-time person for data processing and one full-time person for clerical services. The new day supervisor for patient record services began duties in January, 1987.

Purging of death charts from permanent file began; 1981 and 1982 charts were sent off-site to Command Storage while those from 1983 to 1985 were stored on-site to Command Storage. The Departmental Disaster Plan was revised. Reclassification of supervisors was approved by the executive director. The year end financial statement was 0.8 percent under budget.

DEPARTMENT OF MICROBIOLOGY

General Statistics
Total Specimens

	1985/86	1986/87	Percentage 1985/86
Clinical Bacteriology	75,614	82,577	109
Clinical Immunology	56,521	46,523	98
Enteric Bacteriology	3,418	5,806	170
Parasitology	5,863	7,010	118
Special Bacteriology (GC)	33,936	36,401	107
Respiratory Bacteriology	14,054	8,951	63
Mycology	5,168	5,621	109
Sanitary Bacteriology	25,644	23,997	94
Virology including EM	26,941	37,450	139
Total	**247,186**	**254,300**	**104**

Total Units (Old)

	1985/86	1986/87	Percentage 1985/86
Clinical Bacteriology	2,434,392	1,695,817	70
Clinical Immunology	951,883	594,657	62
Enteric Bacteriology	249,795	311,345	125
Parasitology	271,065	217,636	80
Special Bacteriology (GC)	372,060	475,854	128
Respiratory Bacteriology	550,039	416,272	76
Mycology	252,995	254,158	100
Sanitary Bacteriology	970,256	921,174	95
Virology Including EM	2,905,383	997,111	34
Total	**8,957,868**	**5,884,024**	**66**

Clinical Bacteriology

In June, 1986 antibiotic assay service was transferred from the Respiratory Division to Clinical Bacteriology. Staff was trained both in-house and by the manufacturer, Abbott Ltd., to operate the T.D.X. instrument.

The Sensititre system received a newly expanded operating program in November, 1986. This permitted a more detailed examination of information generated and stored in data banks.

Because of financial restraints, no new equipment purchases were undertaken in the past year. At the same time, offers were accepted to look at a number of updated microbiology computer systems and to compare with present equipment.

Two visits to outside institutions were undertaken by three staff members. There were no major breakdowns or failures of apparatus. A number of instruments are now exceeding their indicated life-span.

A new improved urine screening method was introduced and serological kits for C.S.F. examination were reintroduced. Updated antibiotic panels for the Sensititre were designed and ordered.

A number of developmental projects began during the year including: the use of heat-stable thermonuclease for Staphyloccus aureus indentification; use of growth curves for detection of antibiotic tolerance in bacteria; and evaluation of a Clostridium difficulty toxin detection kit by Marian Scientific for hospital-acquired diarrhea. At the end of the year further projects were undertaken to optimize non-fermenter and coagulase negative staphylocci identification.

No major epidemiology outbreaks occured in 1986–87. A sensitivity pattern survey was published in February, 1987. The most notable feature was an overall decrease in the numbers of usual isolates, e.g. E. coli and Klebsiella to be replaced by Pseudomonas and Providencia. This trend has been noticed for a number of years, but was most marked in this survey and corresponds with the overall increasing resistance of isolates as well as development of a Cystic Fibrosis clinic at the Victoria General Hospital. The full impact of this clinic has yet to be felt.

In June, 1986, a new medical microbiology resident joined the training program.

Clinical Immunology and Virology

Routine requests for HIV antibody testing, diagnosis of genital chlamydia and respiratory syncytial virus infections increased markedly during the course of the year. In addition there were outbreaks of influenza and enteroviral diarrhea. Special transplant services—set up a year ago to test for CMV antibody status of organ donors and recipients for the transplanation unit—have been expanded to include testing for HBsAg and HIV antibody along with implementation of an on call system for long weekends.

The continuing increase in genital specimens for chlamydia testing prompted the division to seek an alternative testing procedure, as we were unable to cope with large volumes using the Syva IFT for chlamydia. The Abbott Chlamydiazyme semi-automatic system was evaluated and, subsequently, implemented with the cooperation of the provincial Department of Health. This implementation coincided with the long awaited change from an RIA to an EIA procedure for hepatitis B serology, utilizing the same instrumentation as Chlamydiazyme. This has enhanced early reporting and reduced operating costs for these tests.

Along the same line, the division introduced an indirect IFT using DuPont's mouse monoclonal antibody directed against CMV early antigen for the rapid detection of CMV in culture. This has considerably shortened the usual one to six weeks reporting for CMV isolation to two to seven days.

The division has also developed an Enterovirus typing protocol using 96 well culture plates, thereby replacing the relatively time-consuming immuno-EM typing scheme.

In response to a request from the Department of Health, the division participated in a measles antibody survey of 140 primary school children in the Truro area. Approximately 99 percent of the children were found to have antibody to measles virus.

Public Health Microbiology

This division was formed from the union of the divisions of Enteric Bacteriology and Public Health Bacteriology.

Financial restraint and a utilization review have been important factors in reducing the number of tests performed. The quality of the work performed has remained high, as shown by quality control survey results.

Although many areas had an increase in the number of specimens and units generated, there was a slight decrease overall because of the transfer of antibiotic assay to Clinical Bacteriology.

The Enteric section served as the laboratory support for an outbreak of a lactose positive Salmonella newport in a local nursing home. This outbreak involved a large number of patients and lasted from July to November. In addition, there were outbreaks of Salmonella typhimurium

in Kentville, Bridgewater and Cape Breton during late August and September. Nineteen isolates of Campylobacter jejuni were referred from the New Glasgow area from August to December, and an outbreak of Salmonella heidelberg involving patients from the Halifax area and in the Victoria General was investigated from October to January. Two serotypes of Salmonella were identified for the first time in Nova Scotia: S. bonaire IV in September and S. inganda in November. Escherichia coli 0157:H7 emerged as one of the more common enteric pathogens in Nova Scotia. Of interest were the isolations of a heat stable toxin producing E. coli (027:H20) from a traveller to Mexico, and two Salmonella typhi that were isolated from travellers.

Sanitary Bacteriology continued to be busy. The phosphatase method for screening for raw milk was changed to Rutger's method, as this method is technically easier and has greater sensitivity.

The Respiratory section was involved in increased environmental surveillance for legionella following an increase in the number of cases of infection. There was also an increase in the number of mycobacteria [other than tuberculosis (MOTT)] isolated. The general decline in tuberculosis continued, although other areas exhibited slowed rates of decline.

Mycology remained busy. Work continued on easier methods for determination of antifungal MIC using a radiometric method; agar diffusion susceptibilities; and the use of calcofluor white for easier and more rapid microscopy of specimens.

Special Identification (GC/Trich Section) had an increase in specimens. There was only one isolate of PPNG isolated. Parasitology also experienced an increase in specimen numbers. Toluidine blue 0 staining of Pheumocystis carinii was initiated, and improved methods for the identification of proglottids were adopted.

Research and Development

Projects included the continuation of quantitating anti-cardiolipin antibodies in human and animal sera; evaluation of various test kits for rapid identification of Clostridium difficile Toxin A; E. coli 0157:H7 Enrichment—to accumulate information regarding the population growth of coliforms in stool and to quantify the number of sorbitol positive and negative colonies present, and also the number of lactose positive and negative colonies present; Teicoplanin—a randomized blinded comparative study

sponsored by and funded by Merrell Dow Research Institute of Teicoplanin versus Vancomycin in the treatment of vascular-access associated bacteremia/Septicemia caused by gram-positive bacteria.

Other projects entailed clinical significance of various strains of Staphylococcus eipdermidis in Septicemic patients. Laboratory investigation comprised of sensitivity patterns against several antibiotics, slime production and biotyping. The study of a new antibiotic is under development—Deptomycin.

The Myocarditis Study, funded by the Canadian Heart Foundation, is searching for a possible viral/bacterial etiology of coronary heart disease. Detection of HIV-1 antigen in patients' lymphocyte cultures, using reverse transcriptase and, more recently, antigen capture ELISA techniques.

Commercial Western Blot Kits were evaluated for detection of specific proteins to HIV-1.

DEPARTMENT OF PATHOLOGY

Anatomical Pathology

Statistics

Total Surgical Pathology		22,316 Cases
(VG Hospital)		17,054
(Other Agencies)		5,262
Consults from Regional Laboratories		1,249
Frozen Sections		1,557
Total Cytopathology		71,461
Gynecologic		67,925
Non-Gynecologic		3,224
F.N.A. Specimens		312
Total Autopsies		293
(VG Hospital)		195
(Medical Examiner Cases)		98
Total Workload in SC Units		
Histopathology		3,296,117
Cytopathology		1,538,167
	Total	4,834,284

Method Development

Immunoperoxidase Procedures

The avidin biotin immunoperoxidase procedure was put into effect as a replacement for the indirect conjugated immunoperoxidase procedure. Results have been consistently better and the stained slides definitely more intense. Many dilutions have been altered because of the sensitivity of the procedure. This represents a cost saving to the department.

The following new antisera were tested: monoclonal virnentin—best on Carnoy's fixed tissue but did not give consistent results; Monoclonal collagen type IV—best on Carnoy's fixed tissue also gave poor results on tissue routinely formalin fixed; Polyclonal myosin—gave poor results; Monoclonal LEU-M1—gave good results.

The monoclonal HLA-Dr antigen was tested and found reproducible on fine needle aspirate preparations of kidney. It is now being done as a project for Dr. Gupta by three technologists from the Special Stains area.

A modified Jenner Giemsa procedure was put into use for plastic embedded bone marrow specimens. A modified Jones Basement Membrane Silver procedure using the microwave oven was put into use for kidney tissue now being microwave-processed. Continual updating of the laboratory manual and safety manual is performed.

Neurohistology Procedures

Frozen sections are routinely done on all temporal arteries from the neuro OR. The methodology for handling sural nerve biopsies has been replaced with a new procedure from the Mayo Clinic.

Special Methods Procedure—Microwave Processing

A microwave oven was purchased for the department in September, 1986. It was put into use for the routine processing of stat biopsies such as cardiac, liver, kidney, cervix and gastric in October, 1986. Microwave fixation is now being worked on. Technologists from this area maintain a cardiac biopsy kit and collect biopsies directly from the cardiac catheterization unit immediately upon their removal.

Immunopathology Lab

The main area of concern for this year was the antinuclear antibody profile due to a 30 percent increase in these costly and time-consuming tests. As a result, testing was expanded as well as made more cost and time efficient. Antibodies to Sc1-70 (scleroderma marker antibody) and Jo-1 (found in 30 percent of polymyosities patients) were added to the panel of antibodies detected by immunodiffusion. A method was established for the in-house preparation of double-diffusion plates and calf thymus powder. This resulted in a cost saving of approximately $2,800 in reagents and materials. A computer program was written to receive, sort, print and file data. Depending on the specific antibody activity, a clinical comment is made regarding the significance of this antibody. All reports as well as an alphabetic file are printed. This has greatly reduced clerical, technical and medical staff time.

A method of detecting anti-histone antibodies is now done simultaneously on a commercially prepared dual substrate, 8 well slide. Six patients and controls can be screened for the three antibodies on one slide. Previous methods detected only one antibody per substrate and would have required 54 slides, prepared in-house, for the same screen.

In March work began on an immunoperoxidase technique for detecting lymphoma marker antibodies in frozen tissue sections. A method of tissue fixation and processing as well as antibody dilutions has been established on control tissue. Work on actual cases will be carried on in the next fiscal year.

Clinical Chemistry

Scientific

Staff was active in research and development, with seven papers published and a further six papers submitted or in preparation. There were 18 presentations and published abstracts, reflecting multiple collaborative efforts within and beyond the Department.

Administrative

Breakdown of Procedures/Units

	Procedures	Units
V.G.H. Blood Collection	116,370	930,960
Routine Chemistry	2,792,895	4,787,546
Endocrinology	148,301	2,499,032
Toxicology	26,630	503,175
Environmental	199,696	1,584,108
TOTAL	3,283,892	10,304,821

Hematology

Scientific

New methods include: Granulocolor staining system—cytocolor; lymphocolor staining system—cytocolor; direct and indirect immunofluorescence staining; immunoperoxidase using avidin biotin and EAC and avidin biotin and DAB; drug treatment of serum to detect drug antibodies reacting by the immnune-complex mechanism, computer programs PFS WRITE and REFLEX using Zenith computer; agar assay for megakaryocyte colonies.

Modifications to methods include: Sudan Black B staining system changed to Sigma kit; periodic Acid-Schiff staining system changed to Sigma kit; update of ABO testing; addition of a control to D-typing method when direct antiglobulin test is positive; bio Rad ferritin kit; kallestad IgE kit change to IRMA technique; increased utilization of automated differentials; improved platelet preparation or PNP test; testing for coagulation inhibitors by platelet neutralization test; dimertest kit.

Administrative

Test performed: 889,734—a 6 percent decrease compared with 1985–86 due largely to a continuing reduction in the number of manual blood film examinations, reflecting increased utilization by the laboratory of the automated three-part differential produced by the two cell counters.

Statistics Canada units: 4,865,786—a 15 percent decrease compared with 1985–86 due partly to the above-mentioned reduction in the

number of manual blood films and partly to the lowered unit values in blood bank.

Workload by Section:

SECTION	1986–87 UNITS	%	1985–86 UNITS	%
Blood Bank	1,074,414	22	1,687,093	29
General Hematology	1,505,559	31	1,172,190	21
Microscopy	711,708	15	1,090,499	19
Hemostasis	648,052	13	769,228	13
RIA Lab	509,529	10	453,636	8
Immunology	210,342	4	366,579	6
Cellular Investigations	206,182	4	207,937	4

Workload by Source:

	UNITS	%
V.G. Hospital inpatients	2,247,565	56
V.G. Hospital outpatients	1,213,494	30
Referred from other hospitals	581,456	14

Productivity:
36.4 units/pd. hr. (standard 35–38)
43.2 units/worked hr.

NURSING DIVISION

NURSING ADMINISTRATION DEPARTMENT

The Department of Nursing Administration provides staff resources and systems to support the operations of the nursing division. The department accepted the responsibility for new programs during the year with the transfers of the Quality Monitoring component of the Nurse Staffing System, the Quality Assurance Program, and the Standard Care Plans responsibilities from the Research, Development, and Continuing Education Department of the nursing division.

Staffing

Administrative supervisors provide administrative support to the hospital on evenings/nights, weekends and holidays. Management of the float pool system was improved by dividing the large pool of casual nurses into a medical, surgical and critical care float pool to support the new nursing division organization. Other projects included development of criteria to manage the float pools; development of expectation for the administrative supervisor role; a review of the administrative supervisor job description; development of an orientation manual for new administrative supervisors; participation on nursing and hospital committees; and attendance at special educational sessions.

The supervisors hired 125 casual staff and received 115 resignations during the year. Many of the staff who resigned accepted positions on the nursing units. A needs assessment identified the educational sessions required to assist casual staff to adapt to the new patient care delivery system.

The nursing staff system was maintained and enhanced during the year. The average daily workload for the year was 1,004 for 685 patients classified. Compared with the previous year, this represents an increase of 16 units of workload per day and a daily requirement for an additional eight nurses.

The patient type compliance of the patient classification system audit was increased to 81.9 percent from 74.4 percent in 1985. This increase resulted from extensive work with nurse managers and staff nurses.

The variable staffing component of the system was extended to the

Surgical Nursing Department, with a goal to staff nursing units with 90 percent of recommended staffing suggested by the system.

The transfer of the quality monitoring component of the Nurse Staffing System was completed by March 31. The project nurse conducted monthly orientation sessions for new nursing staff, met with all new nurse managers, provided in-service and reinforcement sessions on the nursing units, and assisted with the revision of the patient classification system indicators for classifying patients.

Computer Project

The nursing task force activated in January, 1986 assisted with the development of software for Nursing's computerized applications. In June, 1986 two nursing units received computer training and went on-line in July, 1986. In September a third pilot nursing unit was selected to evaluate the new telecommunication twisted wire technology. To date, computer terminals are on all Medical Nursing units and the majority of the nursing staff are trained.

Other activities included developing a computer user manual, sharing information sessions about the nursing computer project with Nursing Forum members, Special Services Department, Victoria General Hospital School of Nursing faculty, and with directors of nursing from other provinces who came for on-site visits.

Office Systems

The nursing administration department maintained a high level of productivity during the past year. Manual systems were reviewed and use of the automated system was increased. A computer program for casual staff recording was pilot tested and implemented. The aim is to increase clerical efficiency and provide timely information for administrative supervisors.

A consultant conducted a study to review the administrative support services and systems required to support the ongoing operation of the Nursing Division. The outcome of the study supported the need for an office manager in the nursing office.

A major update of the three major nursing manuals was completed with the assistance of a summer work project employee. Use of the hospital's word processing service for revision of procedures and prac-

tices for the nursing manuals has enhanced manual maintenance.

MEDICAL NURSING

Variable staffing continued and the goal of providing a high level of nursing care continued while keeping the economic situation in perspective. The aim was to staff our units to approximately 90 percent of the Medicus recommended; utilization was 89.9 percent.

The average compliance between auditors and units for use of patient indicators was 85 percent. The division average was 81.9 percent.

The clinical promotion study continued on five units with another unit joining the study as a central unit.

One unit functioned as the pilot unit for computerization and the medical units were selected to join the computerization project first. At present, staff from all units are being trained to use the computers.

The major accomplishment was the conversion from team nursing to total patient care as the nursing care delivery system. The concept of total patient care was initiated to provide a continuity in care for each patient and to ensure each registered nurse's accountability for assigned patients' care.

SURGICAL NURSING

Yearly environmental rounds took place on the nursing units with positive results. The Lithotripter Unit opened July 4, 1986, with Nursing providing two full-time employees to this service. Variable staffing was implemented in the Surgical Department in February, 1987. Three intermediate care units were opened and operating by the end of 1986. CNAs in positions designated supernumerary were reassigned in September, 1986. Surgical units have supported the Critical Care Nursing Program, Level I.

Among other significant accomplishments: The ad-mixture for chemotherapy was taken over by Pharmacy, relieving stress on nursing units and a successful Burn Conference was held, sponsored by the Burn Unit and the Nova Scotia Firefighters Burn Treatment Society.

Amalgamation of Ambulatory Care with the appropriate nursing unit is almost complete: 2A now has 40 beds; 9B has 33 beds; 6B has cardiac

cath patients while cardiovascular intensive care was housed on 3B for the renovation of the intensive care unit; 11 Victoria now has 22 beds, losing two beds to the CVICU renovations. The pre-admission testing program has been implemented on all surgery services. Decentralization admitting of gynecology patients has been positive.

Several projects are progressing, including implementation of the recommendations of the Noise Syndicate. The Satellite Pharmacy Project was completed, with nurses finding it extremely helpful. Both 7A and 6B continue to support the cardiac arrest team.

CRITICAL CARE NURSING

Renovations were planned or implemented in several units this year including CVICU, 9A, Emergency Department, 11A OR, SICU and 2A ICU. In conjunction with the renovations, new monitoring equipment was installed. Following completion of recent renovations in Neurosurgery Intensive Care, the unit was renamed the Dr. W. D. Stevenson Unit in honor of the neurosurgeon who pioneered that specialty at the Victoria General.

Staffing requirements and hours of operation were reviewed and adjusted in most units. Job enrichment programs were established for nursing attendants and ward aides in 11A OR. Ten senior clinical nurses in 11A OR tested—and then discontinued—a 10 hour shift schedule. Total patient care was implemented as the delivery system in the five intensive care units and 9A. Staff on 9A were required to change their practices in several areas to accommodate this change. A pilot project to determine the effectiveness of a receptionist in the 3A ICU area was conducted with positive results. An alternate means of providing this needed inservice has to be developed.

There was a 60 percent increase in the number of angioplasty patients admitted to CCU. A new thrombolysis was implemented in CCU. Pulmonary artery catheters are now being used on patients in 2A ICU. Implantation of an internal permanent defibrillator for recurrent ventricular dysrythmias was begun as a treatment modality. Multi-organ retrieval and transplantation continues to be a growing program involving many of our units.

This has been an exciting and challenging year for the critical care areas. Introduction of new technology and treatment modalities has had a pronounced effect on the nursing care patients require.

SPECIALTY SERVICES NURSING

Ambulatory Care Centre

The Nursing services integration project has progressed rapidly throughout the past year. Integration is an approach to combine nursing resources allocated to both inpatient and outpatient components of a clinical service. The head nurse of the integrated inpatient unit assumes responsibility for managing nursing practice in both geographic locations.

Integration was achieved in eight clinical services as follows: Dermatology and 4 South; Gynecology and 5 Victoria; Neurosurgery and 2A; Nephrology and 8 North; Urology and 5B; Rheumatology and 4 West; Respirology and 4A; Surgery and 7 Victoria. The integration process was completed in December, 1987.

Hospice Program

Hospice nurses prepared and submitted three proposals to Nursing administration relating to the following issues: Establishing a multidisciplinary approach to Hospice service within the Victoria General; pain management education; and relocation of Hospice family room to the main Hospital complex.

A Hospice program brochure was prepared and distributed to nursing units for patient and family education. Revised guidelines for use of the Hospice family room were developed and distributed. Hospice nurses were invited as guest speakers or facilitators of group discussions on nine occasions in a variety of educational programs sponsored by other groups. Hospice nurses attended 10 educational programs relating to developmental needs and also attended quarterly meetings of the Palliative Care Network of Nova Scotia. They also participated in planning for a palliative care symposium for Atlantic Canada.

Cardiac Catheterization Unit

Two rooms of the newly constructed Cardiac Catheterization Unit became operational in October, 1986 and construction of the third room was completed in early 1987. As a result of this expansion and the subsequent increase in procedures performed, it was necessary to increase the staffing complement by 4.5 positions (2.5 RN's and 2 technicians). Approval was received in February, 1987 to fill these positions

with departmental employees for a one year term appointment .

Endoscopy/G.I. Function Unit

The nurse-in-charge attended the Canadian Society of G. I. Assistants meetings in Toronto in November, 1986. She now serves as the Nova Scotia representative for the Society.

A G.I. technician's training manual was developed and completed. Patient information sheets relating to all procedures performed in the unit were also developed and forwarded to the Patient Education Committee for approval.

Enterostomal Therapy Program

The two nurses assigned to this program continued to provide service to hospital patients. They also participated in a provincial program that provides enterostomal therapy services to patients, families and health professionals in 10 counties.

Hemodialysis Unit

In June, 1986 the first summer dialysis facility, **Sunshine Retreat**, was established in Cavendish, Prince Edward Island. This facility was staffed by Victoria General personnel and operated for a four week period. It provided the opportunity for dialysis patients to take a vacation away from home and hospital.

The home dialysis unit initiated a pilot project in early 1987 called the Dialysis Helper Program. CNAs employed by the Department of Health will visit patients in their homes to assist with dialysis.

Home Oxygen Program

A volunteer socialization program was developed and established through the Volunteer Services Department. Six volunteers have been selected and trained to visit program patients in their homes.

RESEARCH, DEVELOPMENT AND CONTINUING EDUCATION

This department provides specialized knowledge, skills and resources to support the nursing division through research, education and planning. Major accomplishments this year included: the first Management

of Nursing Practice Research Conference; receipt of a $103,000 National Health Research and Development Program grant for the continuation of the Clinical Promotion Project; presentation of the Clinical Promotion Project work at national and international conferences; implementation of computer training in the Nursing Division; initiation of a Manpower Planning Project; coordination of a Dalhousie Nursing student's collaborative thesis; completion of a variety of proposals and projects to facilitate nursing division operation.

Cardiopulmonary resuscitation update sessions were held twice monthly. Education programs were presented to facilitate the opening of intermediate care units. Operation and maintenance of the patient education channel continued. Many standard nursing care plans were revised and approved. Members of the department responded to internal and external requests for assistance and program evaluations. Work continues on development, implementation and evaluation of the staff nurse clinical performance appraisal system. The role of the clinical nurse level IV is being documented.

In January, 1986 the departments of Research and Development and Continuing Education were integrated. Since then, the department has maintained a high level of productivity while accommodating numerous internal changes such as staff fluctuations and turnover.

EDUCATIONAL SERVICES DIVISION

The Educational Services Division continued to work toward its goal of centralization of educational services at the Victoria General.

This year, a major paper titled "The Future Direction of Allied Health Education at the Victoria General Hospital" was approved by the Board of Commissioners and presented to the Department of Health.

AFFILIATE PROGRAMS

The Affiliate Programs office is well-established and agreements have been negotiated with 26 affiliating agencies. During the year, the coordinator received 209 placement requests and the Victoria General hosted 695 affiliate learners for a total of 5813.5 clinical days.

ALLIED HEALTH PROGRAMS

Allied Health Programs continued to develop and refine curricula for all the schools, and reviewed and revised specific practices related to the schools.

The School of Cytotechnology was surveyed and received full accreditation status.

The School of Respiratory Therapy evaluated and revised the clinical practicum component of the program. Negotiations are underway for additional practicum facilities in other hospitals, and an increase in the number of students admitted to the program is proposed. Plans are progressing to establish a provincial sponsorship program for students entering the Respiratory Therapy program in the fall of 1987. These steps were initiated to offset a national shortage of respiratory therapists.

An agreement for all out-of-province students entering the School of Respiratory Therapy and the School of Cytotechnology has been established. Provinces other than Nova Scotia purchase seats in each of these programs.

The Conjoint Training Program for Nuclear Medicine Technology and the School of Radiological Technology conducted a program evaluation through the implementation of a mock accreditation survey.

The Allied Health Schools graduated 33 students in June, 1986.

HEALTH SCIENCES LIBRARY

The Health Sciences Library continued to work toward centralization of library services.

The Library automated its operations, making use of files designed in-house for this purpose. A new library acquisitions procedure—including a central budget for purchasing books, journals and audio-visual materials—was implemented. A quality assurance program for library services was developed and implemented, and the services at the Health Science Schools Library were completely upgraded. The Library and Audio-Visual Committee approved and implemented revised terms of reference.

MANAGEMENT DEVELOPMENT AND TRAINING

The Department of Management Development and Training continued to work toward two overall objectives—to coordinate developmental activities that will enable managers to improve identified managerial skills; and to initiate and participate in developmental activities that will promote a concept of management and foster esprit d'corps among managers at the Victoria General Hospital. These objectives are realized through three services: Program Service, Consulting Service and Information Service.

The Program Service included approximately 14 programs which were offered to more than 800 managers and supervisors. The programs ranged from a one-hour film fair to an 84-hour management development program for middle level managers. New programs this year included the coordination of a manager orientation program, a training program for orienteers and creative problem-solving workshops for several groups throughout the hospital.

The Consulting Service provided approximately 600 hours of consultation to all levels of managers and supervisors.

The Information Service provided approximately 100 hours of service to all levels in the organization by providing information concerning management development, training programs and projects.

The Victoria General was chosen as one of the sites to pilot a new program developed by International Learning Systems. The International Managing Skills program was piloted with a group of eight managers and

two observers from across the hospital.

A year-end evaluation and reassessment of training needs was carried out and an updated calendar of events will be published for the coming year.

SCHOOL OF NURSING

School administration directed a labor intensive project to assist another diploma program in meeting accreditation standards. Faculty provided numerous hours of expert consultation while assisting the school in attaining full accreditation status. Commendation was received from the Registered Nurses Association of Nova Scotia concerning the quality of professional guidance provided by the Victoria General Hospital's School of Nursing.

Program development within the diploma education program of the School of Nursing remains stable. Curriculum change focused on revision in nursing management experiences to reflect the hospital's move to total patient care. The impact of this change on the graduate's nursing practice will be evaluated.

The School of Nursing graduated 100 students in June, 1986 with 97 percent successful in the first writing of the National Registration exams. In a survey, 95 percent of employers indicated that graduates were meeting or exceeding their expectations.

The Post RN Short Courses will be transferred from the Nursing Services Division to the Educational Services Division effective April, 1987. As plans progress for the smooth transition of this transfer, new goals and objectives will be formulated for nursing education programming at the diploma and post-graduate levels.

STUDENT SERVICES

Student Services offers a wide variety of services including registrar, recruitment and orientation to the Health Science Schools, coordination of the residents' assistance program, student counselling and centralized room scheduling.

Statistics reported from Student Services are as follows:

Class of 1986

School	No. Graduated	Attrition Rate, %	Pass Rate, %
Cytotechnology	7	12.50	100
Nuclear Medicine	4	0	100
Respiratory Therapy	14	12.50	100
Radiological Technology	8	27.27	100
Nursing	100	32.40	97

MEAN ATTRITION—21.16% (A decrease from 26.22% for the class of 1985)

Class of 1987

School	No. of Applications Received	Number Admitted
Cytotechnology	45	5
Nuclear Medicine	N/A	4
Respiratory Therapy	175	15
Radiological Technology	103	15
Nursing	395	109

TOTAL NUMBER OF APPLICATIONS—718 (A 19.9% Increase over classes of 1986)

SPECIAL SERVICES DIVISION

In 1986–87 the 415 employees and nine departments within the Special Services Division had several goals including: providing quality patient care; providing leadership and innovation in the hospital community; promoting effective communication with Special Services and with other divisions; promoting educational development; and promoting research and development.

Communication within the division and with other divisions was given particular attention. Within the division a newsletter was published, an open house was held and regular meetings of the Special Services Group (department heads) and Special Services Forum (next level managers) occurred. As a means of enhancing interdivision communication, the Special Services Group met with managers from the Nursing Division. These meetings will be continued during 1987–88.

Liaison committees were established between medical staff, physiotherapy, occupational therapy and dietetics, proving to be an excellent forum for discussing issues of mutual concern. Also in the area of communication, the division began producing the monthly Special Services Feature. The Feature is a two page description of a department, its recent achievements and plans for the future. Each month a different department is presented. The Feature was sent to Victoria General's Board of Commissioners, managers within the Victoria General, medical department heads and other parties with a special interest in the department.

Travenol Management Services completed the pilot Value Improvement Project (VIP) at the Victoria General. During the project the costs of a hospital stay for a patient with a total hip replacement and for an uncomplicated myocardial infarction (MI) were determined. The costs were compared to the four other Canadian hospitals in the study. After the costing was done and comparisons made, clinical staff worked together to identify ways of reducing costs while maintaining or increasing the quality of care. Following completion of the total hip and MI projects, the Victoria General assigned two full-time equivalent staff to carry on the project. In 1986–87, the team monitored the progress of recommendations made by the MI and total hip task forces and determined the cost of a cholestectomy. The next area to be studied is coronary artery bypass grafting.

Manpower planning was a concern to all departments within Special

Services; particularly the departments experiencing high turnover rates and those having difficulty attracting experienced staff. During the summer of 1986, an administrative resident completed a manpower planning project. The project was followed by a study of the costs associated with turnover rates, the components of job satisfaction and possible ways to reduce turnover—particularly in the physiotherapy department.

Staff within Special Services were active members of several hospital-wide committees. The hospital's Mission Statement Task Force, Safety Council and Quality Assurance Committees were chaired by Special Services department heads.

Planning for the future, developing and monitoring productivity indicators, and implementing comprehensive quality assurance programs were other areas emphasized by the Special Services Division in 1986–87.

VALUE IMPROVEMENT

The hospital initially participated in the Value Improvement Process, a project of Travenol Management Services, in 1984–85. A pilot project was performed at that time to look at the feasibility of implementing VIP in Canada.

The Victoria General undertook two task forces in collaboration with consultants from Travenol Management Services in the spring of 1986. A review of myocardial infarctions and total hip replacements occured between January and June, 1986.

The primary objective of VIP is to reduce hospital costs while maintaining the quality of care. The multidisciplinary task forces made recommendations to reduce lengths of stay, improve patient education, reduce test and x-ray usage, reduce supply costs, reduce operating room staffing and to increase physiotherapy weekend coverage. Savings of $800,000 were projected.

Subsequent to the successful Myocardial Infarction and Total Hip Task Forces, the hospital established a VIP office in November, 1986 to run task forces using its own internal resources. A review of cholecystectomies was completed between November, 1986 and March, 1987. Recommendations were made to implement a Same Day Surgical Admissions Program. The Program's goals are: to reduce length of stay, to reduce drug costs, to reduce test usage, to reduce physiotherapy usage

and to reduce use of incentive spirometry. Several general recommendations to improve the operating rooms were made as well. Savings of $45,000 to $90,000 were projected.

DIETETICS

During the past year the Department of Dietetics pursued its mission of providing quality food, nutrition and educational services to patients, staff, students and visitors of the Victoria General Hospital.

The functions of the department were supported by several departmental committees. Under the direction of the Quality Assurance Committee, audits were conducted in the areas of client satisfaction, nutritional care, sanitation and safety, food service, administrative support and education. The Attendance Improvement Committee undertook activities to promote improved attendance. The result was an overall improvement of 2.6 days per employee or 18.7 over 1985–86. The Dietary Safety, Menu, Evaluation and Standardization of Products, and Employee Award were other committees active during 1986–87.

Computerization in areas of the department's operations improved efficiency and statistical reporting. On one nursing unit, computerized diet order entry was implemented. Additional units will be added as terminals are installed and staff are trained. The use of computerized patient tray labels meant improvements in the legibility of patient names, room numbers and diet orders on menus. Reports available through the computer include a monthly patient census report, a daily diet count, a summary of dietary consults, a list of patients by specific diet type and dietary patient profile. Further developments in the area of computerization included the development of a master plan for the computerization of food production systems including inventory, recipe expansion and pricing.

Outpatient consults to clinical dietitians increased by 103 percent over 1985–86. The expansion of the Victoria General's outpatient programs contributed to this increase. In response, the clinical nutrition service intends to integrate inpatient and outpatient dietitian services to improve the continuity of care and communication with medical staff.

During 1986–87, referrals to the Eating Disorder Outpatient Program increased from two in the first quarter to 20 in the last quarter of the year. A series of seven lectures and a diet exchange system have been developed for this group of patients.

Nutrition promotion within the Cancer Treatment and Research Foundation was increased in an effort to heighten the profile of dietary services to patients there. A nutrition package was developed for all patients admitted through nursing staff and a video entitled "Your Cancer Care Diet" was shown to more than 100 persons by the dietitian.

The Weather Watch was the first cafeteria to implement a smoke free policy. Customer reaction was fairly positive and extension to other cafeterias has been scheduled. The Acadian Room underwent renovation, revised its menu, implemented waiter service and extended its hours. This resulted in a substantial increase in revenues. A successful bakeshop featuring cookies, breads and squares was opened in the Acadia Room.

The revised edition of the Victoria General Hospital Diet Manual arrived in January, 1987. This necessitated minor changes to existing patient menus and the development of a transitional light diet menu for post-surgical patients.

The nutrition care intervention program was piloted on select units in the fall of 1986. The program proved useful in identifying patients requiring nutritional intervention and—with the exception of a few units—was implemented hospital-wide.

Education is a major component of the department's activities. As in past years, a one-year dietetic internship program was supported with 10 dietitians graduating. Presentations were made to nursing and critical care nursing students, interns, residents and Dalhousie University medical students. Staff within the hospital also requested lectures on nutrition topics. For example, a presentation on osteoporosis and nutrition was prepared for a group of nurses and physiotherapists.

Victoria General dietetic staff were often requested to speak to community agencies and meetings of professional groups. Among others were requests from the United Ostomy Association, Nova Scotia Cancer Society, Dartmouth General Hospital and the Newfoundland Dietetic Association.

Slide tape presentations and information booklets were revised or begun for cardiac, renal, oral surgery and arthritis patients.

Statistics

Food Service

Patient & Student Meal Days	331,862
Non-Patient Meal Days	239,742
Total Meal Days	571,604
Full-Time Employees	246.5

Clinical Service

Total Consults to a Dietitian	3,212
Inpatient Consults	2,834
Outpatient Consults	378
Consults per month	268
Nutrition Clinic Patients	1,628

OCCUPATIONAL THERAPY

Occupational Therapy was involved in the formation of several support groups for patients and their families. Groups for patients with burns, head injuries and strokes provide an opportunity for patients and families to talk with others in similar circumstances to discuss coping and problem solving techniques.

A new statistical collection system was implemented in the department. As a result it became possible to document the types of splints made, materials used and number fabricated. The system assisted the Occupational Therapy Department and Inventory Control in monitoring the use of materials and made the ordering process more efficient.

In 1986–87 the department produced 7,000 splints, an increase of 1,400 over 1985–86. A new area of involvement for occupational therapists is the fabrication of splints of some orthopedic patients in the recovery room immediately following surgery. The department, recognized for its splinting expertise, was consulted by other occupational therapy departments in the Maritimes.

Two other areas of extensive Occupational Therapy involvement were in Psychiatry and the Stroke and Geriatric Assessment (SAGA) Team. The Psychiatry program was reorganized and the Kielhofner program plan (or life skills approach to psychosocial management), was

implemented. Two full time therapists provided extensive rehab services to the SAGA team. The department developed a temporary seating program, a self-care assessment and treatment service, and group therapy sessions for stroke and geriatric patients.

Patient education is always a valuable aspect of the Occupational Therapy treatment process. During 1986–87 the department held rheumatology education workshops for patients from across Nova Scotia. An audiovisual presentation was developed to describe the role of the Occupational Therapy Department, with the splinting component highlighted. The presentation was used in meetings with medical staff and administration and in teaching residents and interns.

The Department provided clinical experience to 18 Occupational Therapy students. Research and community projects devised by the department and carried out by Dalhousie occupational therapy students were also supervised. The projects included developing a community resource center for the department and a retrospective study of orthotics supplied to patients for pain relief. Three department staff held joint appointments with the Dalhousie University School of Occupational Therapy. Their fields of expertise were rheumatology, burns, plastics and orthopedics.

Also during 1986–87 the department participated in a number of studies including a manpower study of occupational therapists in Canada; a study of the effectiveness of occupational therapists in Canada; a study of the effectiveness of occupational therapy; a public relations study sponsored by the Nova Scotia Society of Occupational Therapists; and a study of home care needs.

Statistics

	1986–87
Attendance	12,050
Time Units	192,811
Weighted Units	897,700

PHARMACEUTICAL SERVICES

The patient-oriented nature of pharmacy practice guides the activities of the Department of Pharmaceutical Services—from drug product selection, through compounding and dispensing, to the provision of drug information and patient and staff drug education programs. The following

illustrates the extent of the department's activities during 1986–87.

Pharmacy-based total parenteral nutrition (TPN) admixture services were initiated in January, 1986. These services had the support of the Pharmacy and Therapeutics Committee of the medical staff and the Nutrition Support Advisory Committee of the Department of Surgery. Pharmacy staff in the sterile products lab monitor TPN therapy, recommend electrolyte doses and monitor potential incompatibilities. The centralized TPN program reduced TPN costs by more than $120,000 per year.

Pharmacy-based chemotherapy admixtures were introduced in 1986. In addition to preparation of specific doses of chemotherapy for patients, this program involves monitoring drug therapy, recommending dosage and monitoring for drug incompatibilities. The program resulted in a drug cost saving of $50,000 due to waste reduction. Also, the drug administration protocol for patients with cancer of the head and neck was revised, resulting in drug cost savings of $50 per course of therapy ($1,200 annually).

The development of a clinical surgical pharmacy service was investigated with the support of Dr. B.J. Perey, Head, Department of Surgery. A pilot project on two surgical wards identified areas of potential involvement for pharmacists.

A drug quality control recycling program in which drugs are accurately identified, properly relabelled and repackaged was initiated in January.

The Department of Pharmaceutical Services participated in the training of pharmacy students through the Practical Training Program (three students for one week each), the Clinical Clerkship Program for fourth year students (20 students for one week each) and the Pharmacy Residency Program (2 residents for one week each). The quality control pharmacist was involved in the radiopharmacy training of nuclear medicine technologists and nuclear medicine residents. In addition, two members of the department held joint appointments with the College of Pharmacy, Dalhousie University.

The department provided inservices to other hospital staff on changes to drug products on the cardiac arrest trays and the procedures for centralized total parental nutrition and chemotherapy admixture programs. In March, the department officially opened its Drug Information

Centre which provides accurate and timely information on drugs and drug use to health professionals.

The clinical consultant was involved in a number of studies in collaboration with other pharmacy, hospital and medical staff. Project areas included the effect of a two-day stop order on benzodiazepine; cephalosporin utilization review; acyclovir-cyclosporine interaction; cyclosporine pharmacokinetics; and the effect of plasmapheresis on drug removal. Several presentations and publications resulted from projects.

Statistics

	Average yearly Activity
Medication Orders	400,000 orders reviewed
Prescriptions	100,000 dispensed
Ward Stock	67,000 packaged units distributed
Sterile Products Labs:	
Total Parenteral Nutrition	4,300 patient days of TPN
Chemotherapy	1,600 doses
Cardioplegic Solution	2,500 litres
Manufacturing:	
Bull compounding	1,800 batches and 6,000 packages
Packaging	17,000 packages of tablets/capsules
Radiopharmaceuticals	1,300 doses
Drug Information Centre	1,200 questions answered
Drug Recycling project	drugs valued at $29,000 per month recovered for re-issue

PASTORAL CARE

1986–87 was the first full year of operation for the Victoria General Hospital's Pastoral Care Department. The establishment of the department, with the appointment of a full time co-ordinator and secretary, united members of the Victoria General's pastoral care community. The community includes hospital chaplains, clergy and lay visitors from community hospitals.

To guide the development of the department, a program proposal was prepared by the co-ordinator and approved by the hospital's Management Committee. The formation of a Pastoral Care Advisory Council composed of church and hospital division representatives also played a

role in the development of the Pastoral Care Department.

The purpose of pastoral care involvement in clinical programs is to attend to the spiritual, ethical and emotional needs of patients. In addition to visiting approximately 80 percent of patients admitted to the Victoria General, chaplains became involved with several specific programs including the Stroke and Geriatric program; AIDS and Cardiac Education teams; Hospice; Multi-organ Transplant; Gynecology Oncology; and the Medical Ethics Planning Committee.

In the fall of 1986, Larry Holst of Chicago's Lutheran General Hospital and the author of "Hospital Ministry", presented a successful one day workshop at the Victoria General. Another one day seminar, Caring for the Person with AIDS, and the introduction of Pastoral Care grand rounds provided more opportunities to discuss issues relevant to Pastoral Care.

The Pastoral Care Department offered supervised field experience to seven students from the Atlantic School of Theology and Acadia Divinity College. The department also offered basic and advanced programs in Clinical Pastoral Education to ten students.

A further educational endeavour was the development of a lay training program, jointly sponsored by the Victoria General Hospital, Halifax Infirmary, and I.W.K. Hospital for Children.

PATIENT REPRESENTATIVE

A major goal of the Patient Representative program is to strengthen the link between patients and the hospital, personalizing the hospital experience. In achieving this goal, the Patient Representative had 843 contacts with patients and families in 1986–87.

In April, 1986 the Volunteer-Hospitality Program was established and a volunteer project leader was appointed in October, 1986. Volunteers (specially trained for the Volunteer-Hospitality Program), greet patients when they enter the admitting office and visit patients on the nursing units.

Communication with hospital staff regarding the Patient Representative role and noting trends in concerns expressed by patients is a major component of the Patient Representative's job. To assist with the task, presentations were made to the Nursing Division, new managers, and

hospice volunteers among others. An information letter was sent to medical staff and residents.

The Patient Representative was invited to speak to community groups and health care agencies (such as the Cancer Treatment and Research Foundation) about the role of the Patient Representative at the Victoria General Hospital.

An article in a local publication, a Patient Representative pamphlet, a slide presentation, and the Volunteer-Hospitality Handbook are other ways information about the Patient Representative Program was communicated to patients, staff and the community.

Statistics

Total number of contacts	843
Contacts include:	
Problems/Concerns	434
Compliments	59
Requests for information	105
Hospitality visits	51
Follow-up visits	154
Possible future concerns	40

PHYSIOTHERAPY

The Physiotherapy Department at the Victoria General Hospital—with 33.5 full time positions—is dedicated to providing physiotherapy services to inpatients and outpatients and to providing an environment for physiotherapy teaching and research activity.

In the area of clinical programs, many new developments have occured. Outpatient plastic service physiotherapy coverage was increased and includes attendance at a weekly clinic. A combined Occupational Therapy and Physiotherapy hand program was identified as a need and is in the developmental stage. Permanent physiotherapists were assigned to the pain management unit and the cystic fibrosis team. Physiotherapy became involved in the pre and post-operative care of liver transplant patients.

On the orthopedic service, the physiotherapy treatment program for inpatients with total knee replacements was refined to include a group exercise class as well as individual care augmented by the use of the

continuous passive motion machines. As a result of the Value Improvement Process (VIP), a new physiotherapy protocol for the treatment of total hip patients was developed. The pre and post-operative meniscectomy program was modified to accommodate changes in the surgical procedure.

During 1986–87 physiotherapy staff were involved in the evaluation and development of several multidisciplinary programs. On the hospital's cardiology service, Physiotherapy and other Special Services departments worked with nursing and medical staff to develop an education program for cardiac patients. Cognitive retraining for neuro patients was reviewed and a stimulation program was developed. A back care committee developed a program to review and improve the back fitness of hospital employees.

The staff turnover of 64 percent during 1986–87 was of concern to the department. An assessment of the turnover identified the following reasons: financial remuneration, reclassification, opportunity for research and continuing education and caseload. A training and development package and the assignment of specific research hours were two initiatives taken to address the situation. Further activities to address turnover and an evaluation of its impact will continue through 1987–88.

The Victoria General hosted a caseload management workshop for both hospital staff and physiotherapists from other Maritime provinces. The workshop had a positive influence on the department's ability to handle outpatient referrals within an appropriate time.

Computerization of statistics, revision of the staff orientation program, development of a training program for physiotherapy attendants and the management of quality assurance programs were other major activities of the physiotherapy department.

Through lectures at the Dalhousie School of Physiotherapy and clinical supervision and demonstration, the department participated in the education of physiotherapy students. In addition, education programs for hospital staff in areas such as body mechanics were conducted. Staff also made presentations at workshops and conferences outside the Victoria General.

The commitment of 14 hours per week to research activity was a new development in the department. The ability of nurses to lift and transfer dependent patients safely, and the role of a physical exercise

program in altering the physical activity and body image of patients with anorexia nervosa are two of the current areas of study.

Statistics

	Inpatients	Outpatients	Total
Attendances	41,918	24,985	66,903
Weighted Units	1,179,428	675,380	1,854,808
New Patients	4,637	2,209	6,846
Student Placements	—	—	55

PSYCHOLOGY

Psychology staff were called upon to provide a variety of clinical, scientific, educational and consultative services in 1986–87. Consistent with 1985–86, approximately 60 percent of the total professional resources of the department were devoted to clinical services, 20 percent to departmental administration and developmental activities, and the remaining 20 percent to teaching, research and nonclinical consultation within the hospital and the community.

In 1986–87, half of the department's clinical services were dedicated to patients referred either from Neurosurgery (22 percent), or from the Pain Management Unit (28 percent) for diagnostic or neuropsychological assessments, for instruction in pain control techniques and for psychotherapeutic treatment of anxiety and depressive reactions that sometimes accompany chronic, debilitating conditions. One quarter of the staff's clinical service was dedicated to Psychiatry patients, Endocrinology patients, Occupational Health referrals and patients referred from the Gynecological Oncology Unit. The remaining quarter of clinical services were dedicated to a variety of other medical services of the hospital including: Medicine, Rheumatology, Orthopedics, Anaesthesia, Infectious Diseases, the Burn Unit, Respirology, Hematology, Surgery, and Gastro-Enterology.

In addition to its direct clinical service, Psychology provided professional consultation to physicians, nurses and allied health professionals on psychological aspects of patient care and served on a number of hospital committees. Moreover, Psychology staff were actively involved in professional and volunteer organizations in the community, delivering presentations and workshops to professional and self-help groups in the community on health related issues.

Research and activity in the Department of Psychology was increased to seven percent of the department's total resources in 1986–87. A number of publications, papers and posters were presented at national and international conferences. The areas of study included the relationship between chronic pain and depressive symptoms; the relationship of stress to diabetes; and the psychological concommitants of post-viral syndrome.

During the 1986–87 fiscal year, teaching activities in the Department of Psychology doubled over the previous year to six percent of the department's total resources. The Director maintained his teaching appointments in the Departments of Psychology and Psychiatry at Dalhousie University, and taught two fourth year honours level seminars in Psychology at Dalhousie University.

On a trial basis, the department began development of a Master's level clinical practicum and accepted two Master's level students from the Department of Psychology, St. Mary's University.

In addition, two members of the department served as committee members for three Master theses in clinical psychology.

Statistics

	Patients New	Patients Return	Patients Visits	Contacts on Behalf of Patients
Inpatients	59	20	139	126
Outpatients	186	389	1013	246
Total	245	409	1152	367

SOCIAL WORK

The Social Work Department assumes that hospitalization represents a crisis point in a person's life as well as an opportunity or challenge to change. To help the patient with this adaptation of lifestyle and/or environment, the social worker assists the patient in making functional discharge plans which can be implemented when medical treatment is no longer necessary. The key role of the social worker is to provide a link with the community to ensure continuity of care.

The association between the department and the Maritime School of Social Work remained viable. In 1986–87, five Bachelor of Social Work students and one Masters student were placed in the hospital. In addition, staff provided the School with many hours of supervision, consultation and lecturing.

In the area of staff training and development, staff attended workshops and conferences in areas such as counselling, addiction, oncology and ethics. Staff contributed to their own education through journal presentations and case conferences.

A study of staffing patterns in the Social Work Department was conducted by the Director. The results of this project were presented at a conference in the latter part of 1987. The information was also used in the development of the department's business plan.

Other activities included the development and implementation of an acuity measure to distinguish different types of cases, modernization of the statistics recording system and establishment of a functional quality assurance program.

Statistics

Total staff	16.5
New Cases	3,473
Contacts	20,019

VOLUNTEER SERVICES

Volunteer activities at the Victoria General grew steadily during 1986–87. Acting as the personnel department for volunteers, the Volunteer Services Department recruited and placed volunteers in 32 new programs. Each program was developed by hospital staff in conjunction with the department. The preparation of program development and interview packages, and recruitment and orientation slide shows contributed significantly to the success of programs. Two of the newest volunteer programs offer book delivery to patients and supply guides to patients receiving day surgery.

In 1986 the Volunteer Council was established to provide a communication link between volunteer groups within the Victoria General and hospital administration. The 14 volunteer support groups and the hospital auxiliary are represented on the council.

A series of events during Volunteer Week raised staff awareness of the contribution volunteers make to the hospital, and demonstrated the hospital's appreciation of volunteers' commitment.

The Volunteer Services Department also provided work experience opportunities. For example, in 1986–87 a student from the Sir Frederick Fraser School spent several weeks working in the department.

The Director of the Volunteer Services Department promoted the department's activities and role of volunteers through presentations to staff throughout the hospital. Seminars on motivating and recruiting volunteers were presented to outside agencies.

Statistics

Volunteer hours	12,575
New Programs	32
Support Groups	14
Volunteers	400
Hospital staff working with Volunteers	15

ADMINISTRATIVE SERVICES DIVISION

FINANCE DEPARTMENT

Accounting, Budgeting and Statistical Systems

Accounting, budgeting systems and procedures were reviewed to ensure they are appropriate to the hospital's requirements; to establish the adequacy of the system of internal control; and to enable the performance of effective financial management.

The development of a reconciliation by type of revenue was continued during the year. This was supplemented by the creation of a computer report from the Clinical Chemistry Division segregating Department of Health revenue from non-DOH revenue. These two enhancements have brought the Auditor General's staff closer to removing their qualification in the annual report.

The transition of the General Ledger and the Accounts Payable applications to the Provincial Department of Finance computer centre was accompanied by the following: Departmental financial reports have been available two working days sooner than in prior years on average; payables turnaround time has improved from approximately six weeks to approximately two weeks.

A study group was formed from within the department to review the new CHA/MIS guidelines and to determine their implications for the hospital. The group will develop an implementation plan to meet Department of Health requirements and recommend a revised Chart of Accounts to meet the needs of the hospital.

A Disaster Recovery Plan for inhouse systems was researched, developed and implemented during the year.

A plan was implemented to enhance revenue from patient accommodation through the reclassification of rooms, renovation, alteration and addition of rooms, increases in rates, and the enhancement of financial and administrative practices. Implementation of the plan was accompanied by extensive presentations to and dialogue with affected clinical and nursing staff, and ongoing monitoring of progress.

Support was provided for the continued development of costs and prices for diagnostic and other services. Examples would include devel-

opment of direct expenses by nursing unit and by clinical services, lithotripsy program expense, ambulance and patient transfer service.

For the Diagnostic and Therapeutic Services (under the organizational umbrella of the Department of Medicine), a mandate was established to develop and apply a framework for the analysis of the operations and utilization of these services wtih respect to their efficiency and effectiveness. An analytical framework was developed and applied to more than half the functional units, interhospital comparisons were made, and working definitions developed. Results to the end of the year led to the endorsement of the process by administrative, clinical and managerial staff involved, and the acceptance of recommendations to extend the terms of the project.

Budget Preparation and Administration

The 1987–88 Department of Health budget submissions were delivered on time despite the deadline being moved up. The effect of this change reduced our planning horizon by 36 days over prior years.

A list of services and programs believed to cost more than the average per diem rate was provided to the Department of Health. This composite of input from all clinical departments represented those services and programs which are regional in nature. The department was able to take this information to meetings of the Federal/Provincial Committee on Institutional Medical Services in support of arguments for special diem rates. Further interaction with clinical departments to verify the uniqueness and regional status of some procedures and services is ongoing.

Information and Education

In association with broader systems developments, the quality of information provided was enhanced. Improvements made during the year to the Executive Summary of operating statistics have led to it becoming established as a useful, high level report. Enhancements included the provision of trend information by clinical service, the comparison of actual activity to expected value and the flagging of trends which vary from expectations.

The Comptroller represented the hospital on the HRMS Steering Committee from its inception date in June. Significant developments included: the selection of software also chosen by major teaching hospi-

tals in Canada; inclusion of a time entry module developed by a major teaching hospital with the package; and hospital representation on the project team responsible for implementation.

Departmental Management

There was continued reorganization of work and methods at the clerical level to allow more analysis and quality control.

Due in part to concerns expressed by the Auditor General, arrangements were made for the Manager of Accounting Services to be reassigned for the purposes of developing an Internal Audit program. The position description for the Manager of Accounting Services was rewritten, enhanced and subsequently endorsed by the Civil Service Commission. It is expected the fulfillment of the position's accountabilities by the new incumbent will have significant impact on financial operations.

Roughly 20 percent of staff are considered microcomputer literate; half of these are dependent upon micros to meet daily responsibilities. These developments have taken place despite the fact that we possess only one microcomputer. Steps taken to enable access to this limited resource include staggering work schedules of some staff, accessing slack time from other computers within the hospital, and developing a schedule for advanced booking.

DEPARTMENT OF MANAGEMENT ENGINEERING

The Management Engineering Department is in its third full year of operation at the hospital and is now a mature organizational unit, which contributes a high economic value to hospital operations. The department has two sections, Industrial Engineering and Information Systems. During 1986–87, a work-plan of 54 systems improvement and computer projects was carried out by a staff of 19 professionals. The staff was drawn mostly from entry level positions and have very successfully continued to develop a wide range of specialist skills.

Industrial Engineering

During the past 12 months this section has expanded its staff and has the responsibility for leading the introduction of small systems, predominantly microcomputer-based, into many areas of the hospital. An additional management analyst position was added through the transfer of a hospital staff member with a nursing and administrative background.

This provided a broader skill base for systems and methods improvement projects across all hospital divisions.

A major area of concentration continued to be logistical operations in the Material Support Department. Several projects were completed which recommended structural and work-flow improvements to simplify operations and enhance efficiency in Sterile Supply, Stores and Laundry. Assistance to the hospital's Value Improvement Program was radically increased. Also, demand continued to increase for consulting assistance in statistical methods and data analysis to assist the management of clinical and administrative departments.

Information Systems

The three-year project to develop a large scale comprehensive patient-oriented computerized information system (H/MIS) concluded its software development phase on schedule in March, 1987. This system product is the most current and one of the most advanced systems in Canada. Even before it was complete, it had been exported and installed in two hospitals in Quebec. In February, 1987 the hospital was informed that the NorrKoeping Health District in Sweden had also selected the system. By the turn of the year the Halifax Infirmary was implementing its pharmacy on the Victoria General computer and—subject to satisfactory results—indicated intention to share common computer facilities and services in the future.

The process of implementing the H/MIS software throughout the hospital is now in progress. In some large and complex areas such as Nursing and Pharmacy, this process may take many months and perhaps years.

In the administrative information systems area, the hospital was closely involved as a task force member in the evaluation and selection of a government-wide Human Resource Management System. The ISI system product, with a hospital-developed data collection module, was selected and a major project in the next fiscal year will be installation of the system in the Victoria General. Other major information system initiatives include selection and installation of a replacement materials management computer system and introduction of a pilot project for office automation planned for late 1987.

OPERATIONS DEPARTMENT

During the past year personnel changes occurred in Housekeeping, Ambulatory Care and Laundry Services at the managerial level. Organizational changes were determined and approval was received internally for Plant Engineering, Fire Safety and Security. These have been forwarded to the Civil Service. Porter Escort, Material Support, Bio-Medical and Sterile Supply have all been assessing their organizational structure and are in various stages of finalization before submission to the Civil Service.

Significant progress including increased productivity has been obvious in most services within Operations. Financially, expenditures were reduced over the past two fiscal years as continuous efforts were made to assist in reducing the overall hospital deficit. All services have begun to formalize Quality Assurance Programs, which should be fully implemented by March 31, 1988.

Plant Engineering

This is the first complete fiscal year that the Plant Engineering Department has operated under new management. Consequently it has been a year of reorganization, significant change and growth, particularly in the areas of employee morale and productivity.

In May, 1986 the Architectural Planning Office amalgamated with the Plant Engineering Department. This has yielded significant benefits and increased efficiency in the delivery of planning and maintenance services.

The Plant Engineering Department initiated an analysis by Management Engineering to assess the viability and efficiency of the Transit Tube System. As a result, the entire system was shut down, resulting in substantial savings of approximately $30,000 annually. The responsibility for interdepartmental mail was absorbed by Porter Escort Services.

As a March, 1987 61 capital and maintenance projects were in various stages of implementation. The most notable of these include: The construction of new facilities for the Immunology, Virology and Media Laboratories in the MacKenzie Building; alterations to facilitate total patient care and computerization of nursing units; the construction of the new Cardiovascular Intensive Care Unit in the Victoria Building; the completion of the new and expanded Cardiac Catheterization Unit in the

Centennial Building; the construction of improved facilities for the Department of Social Work and the clerical staff of the Department of Nursing Services in the Centennial Building; and the construction of the new Neuro X-Ray in the Centennial Building.

Material Support

A study was conducted during September and October, 1986 to identify computerization needs for order entry, distribution, purchasing, inventory control and management reporting. The document identifying these specific needs was written and finalized in January, 1987.

Significant achievements included: Reduction in out-of-stock line items from 400 to 200 with a goal set at 113; inventory level reduction from 2M in 1985 to 1.8M in 1987, translating to approximately $400,000 based on 5 percent inflation rate; packing note processing time decrease from four days to two days due to improved paper flow and computer processing time; stores staff reduction of two full-time employees, one in Return Stores and one in Medical/Surgical Stores; introduction of staggering contracts for product category Medical/Surgical.

The appointment of a co-ordinator of Medical/Surgical products has been a valuable addition. The process for evaluation and standardization of Medical/Surgical products has been greatly enhanced as has communications between Material Support and Nursing.

Housekeeping

Operational rounds in 1986–87 were a very successful means of identifying and resolving housekeeping deficiencies. Participants included: The project manager; Plant Engineering; infection Control nurse; executive housekeeper; head nurse of floor being inspected; and the Director of Operations.

The major project of the year was preparation of the housekeeping contract which went to tender in January, 1987. Plans were updated and new service areas added to reflect the hospital's current housekeeping needs. The contract was awarded to Modern Building Cleaning for the term of May 1, 1987 to March 31, 1989.

Waste disposal practices and concerns played a major role in the Housekeeping Department in the past year. A survey to determine waste types and volumes was conducted in the summer of 1986. Data indicated

that approximately 57 tons of garbage is generated at the hospital every week.

Repairs to the incinerator during the fall of 1986 necessitated the transport of all pathological waste to the Tupper Building for incineration over a ten day period. The existing incinerator is not able to generate sufficiently high temperatures to properly destroy certain types of waste and the increasingly high volumes of waste place added stress on the machine.

There is also the environmental concern of pollutants being released into the atmosphere. A number of meetings to discuss these problems and to look at their resolutions have been held with representatives of Plant Engineering. Interhospital meetings regarding the efficient, safe and appropriate disposal of hospital waste have been held.

Audio Visual

The Audio Visual Department experienced considerable growth in production and equipment loans again this year. The department was given the task of producing video imagery of patients for grand rounds and has responded to this challenge.

A recovery system has been set up between the Audio Visual Department and the Accounting Department to recover funds from such services as passport or identification photographs. Other than passports, the class/course photographic sitting and one photograph is free of charge, but costs of individual photographs are recoverable.

Communications

The hospital telephone directory was revised and produced in a binder to permit easy amendments. A new switch was installed to separate patient telephone lines from administrative lines, allowing patients to access MT&T operators directly. Previously, assistance of Victoria General operators was required and this workload had increased operator response time to an unacceptable level.

Bio-Medical Engineering

Productivity levels for repairs and inspection of equipment remain constant from 1985–86. A permanent Bed Repair and Inspection Program was established early in 1987 when a full-time employee was transferred from Plant Engineering to Bio-Medical Engineering.

Porter Escort

The following statistics demonstrate the increase in activity:

	1986/87	1985/86	% Increase
Patients	156,971	146,694	7.0
Equipment/Supplies	37,269	36,702	1.5
Specimens	1,208,510	1,006,830	20.0
Mail	1,424,017	1,337,286	6.5

Among the additional activities taken on by Porter Escort was the inclusion of a scheduled delivery system to replace the pneumatic tube system. This resulted in significant cost reductions and improved delivery service. An inter-hospital courier system has been established and initial feedback indicates that it is efficient and cost-effective.

Sterile Supply

The small Ethylene Oxide Sterilizer was moved from the tenth floor operating room to Sterile Supply. An aerator was purchased to complement the sterilizer. As well, the purchase of a large Ethylene Oxide Sterilizer was approved. These acquisitions made the planning of an area to locate all of the Ethylene Oxide Sterilizer equipment in a separate room necessary. The plan has been completed, the project approved and work will soon begin. This will provide a much safer environment. When the new Ethylene Oxide Sterilizers are installed, the old one will be reconditioned.

Laundry

In April, 1986 a new shift change was introduced. It consists of four days on and four days off, 10 hours and 40 minutes per day. This shift received the consent of management, union and staff. It has proven worthwhile to date and has reduced absenteeism considerably. The rate of absenteeism for 1985–86 was 28 days per person per year while the rate for 1986–87 was 12.8 per person. Total production for the 1986–87 fiscal year was 4,568,067 pounds, an increase of 300,000 pounds over the previous year.

Security

Centralization of Security to the Ambulatory Care Centre, in the main lobby area was initiated and is virtually complete. This physical move has

many long-term goals but will immediately serve to centralize Security Services, as well as key control and security communications for daily operations and disasters.

Training and development for contract personnel was achieved by management/supervisor meetings and team training sessions. Corps members attended a number of related courses at which they attained creditable success. Performance appraisals, selections and hiring practices have been developed, consistent with contractual requirements.

Ambulatory Care

Total patient visits for the Ambulatory Care Centre in 1986–87 were 74,769 as compared to 75,808 for 1985–86. This represents an overall decrease of 1.4 percent (1,039 patient visits) during the year, or a monthly average decrease of 87 patient visits. The relocation of Endocrinology to the Halifax Infirmary on June, 1986 accounts for this decrease. Other significant changes were noted in the following areas: Cardiology increased by 430; Endoscopy-Gastroenterology Function Unit increased by 434; Dermatology Treatment increased by 437; Orthopedics increased by 586; Pain Management increased by 591; Rheumatology increased by 393; and General Surgery increased by 556.

The Victoria General and the Halifax Infirmary began operation of an inter-hospital transportation van for patients between the two hospitals.

PERSONNEL DEPARTMENT

Administrative

There have been a number of changes made in the orientation program material targeted toward new employees. More areas of the hospital are now participating in the program. In addition, employee data information cards which list job particulars, such as name of supervisor, salary, and starting date were developed.

Training

The training officer has been coordinating a number of activities. A needs assessment was conducted on October 1, 1986 and a learning styles session was also conducted. The Medical Terminology course has become more standardized and formalized and has been receiving a good

response. There are now two Medical Terminology Courses underway—a Social Work Department Class and a General Class.

The Nursing Department has an increasing turnover. Recruitment activities have increased and many graduate nurses have been hired.

Casual pay rates have been adjusted for three clinical areas—Physiotherapy, Occupational Therapy and Respiratory Therapy. This move was made to prevent the loss of existing staff to other hospitals and clinics, and to entice individuals to work at the Victoria General.

There were approximately 112 summer positions filled in 1986. Ten of 32 proposed projects were approved by the Department of Development for the creation of summer employment at the Victoria General.

A shift change in Laundry allowing for new hours of operation has resulted in the transfer of 19 part-time employees to full-time status.

The Attendance Improvement Committee organized an Excellent Attendance Banquet in November for those employees with perfect attendance.

The number of suspensions and AWOL in 1986 are consistent with other years. Terminations amounted to ten in 1986, an increase from four in 1985. While verbal warnings were down in 1986, written warnings increased from 50 in 1985 to 72 in 1986. Complimentary letters also increased from 28 in 1985 to 45 in 1986.

Problems arose in administering the long-term disability policy when some employees were not ready to return to work at the completion of term. The Board has agreed to the allowance of a two week (maximum) delay before an individual who has been given clearance by the adjudicator returns to work.

A Civil Service Commission guideline stating individuals who replace civil service employees should be hired on a "casual" or "term" basis has resulted in increased difficulty in filling these jobs for managers. A Maritime Life adjudicator is attempting to give a more long-range reading.

Don Carruthers is now President of the Retired Employees' Association. The Association's office has been furnished and is now being used.

In February the Association began work on a new pamphlet that will assist out-of-town visitors coming to the Victoria General. Retired employees provide regular daily service to Admitting via Volunteer Services.

In May a staff running club was created. This club not only provides a friendly exercise environment, but it has actively participated in a number of charitable functions. In July a Victoria General staff picnic and teddy bear auction took place, raising $1,685 for the hospital. The hospital also entered two teams in the 1986 Corporate Challenge.

Occupational Health

During the past year Occupational Health has placed greater emphasis on health promotion and occupational illness/accident prevention. Presentations to Nursing Forum and Operating Room staff on "Women in the Workplace and Pregnancy" were given and "Video Display Terminals" was presented to Nurses of the central branch of the Occupational Health Nurses Association.

Conditional clearance forms on new employees are now sent to managers, improving the follow-up of tuberculin tests and medical reviews. A screening test for chickenpox to identify non-immune employees was implemented. Revisions were made on the Safety Oriented First Aid Training Manual and immunization/medication standing orders.

The new Occupational Health and Safety Act has led to increased programs in prevention, investigation and follow-up of work accident, occupational illness and environmental concerns. The number of accidents reported during the year has remained constant. The highest direct costs were related to skin problems, back problems and falls and blows. The accident program has been computerized, resulting in greater utilization of time. Training of the secretary to undertake this responsibility has been initiated. A hearing conservation program was implemented in several departments.

The Preplacement Program has led to the referral of 8 percent of new employees to the Occupational Health physician. During the past year a total of 53 employees were referred to the department for attendance improvement and employee assistance programs. Immunization and TB testing services were provided on a regular basis. Hepatitis B screening and immunization were carried out according to policy.